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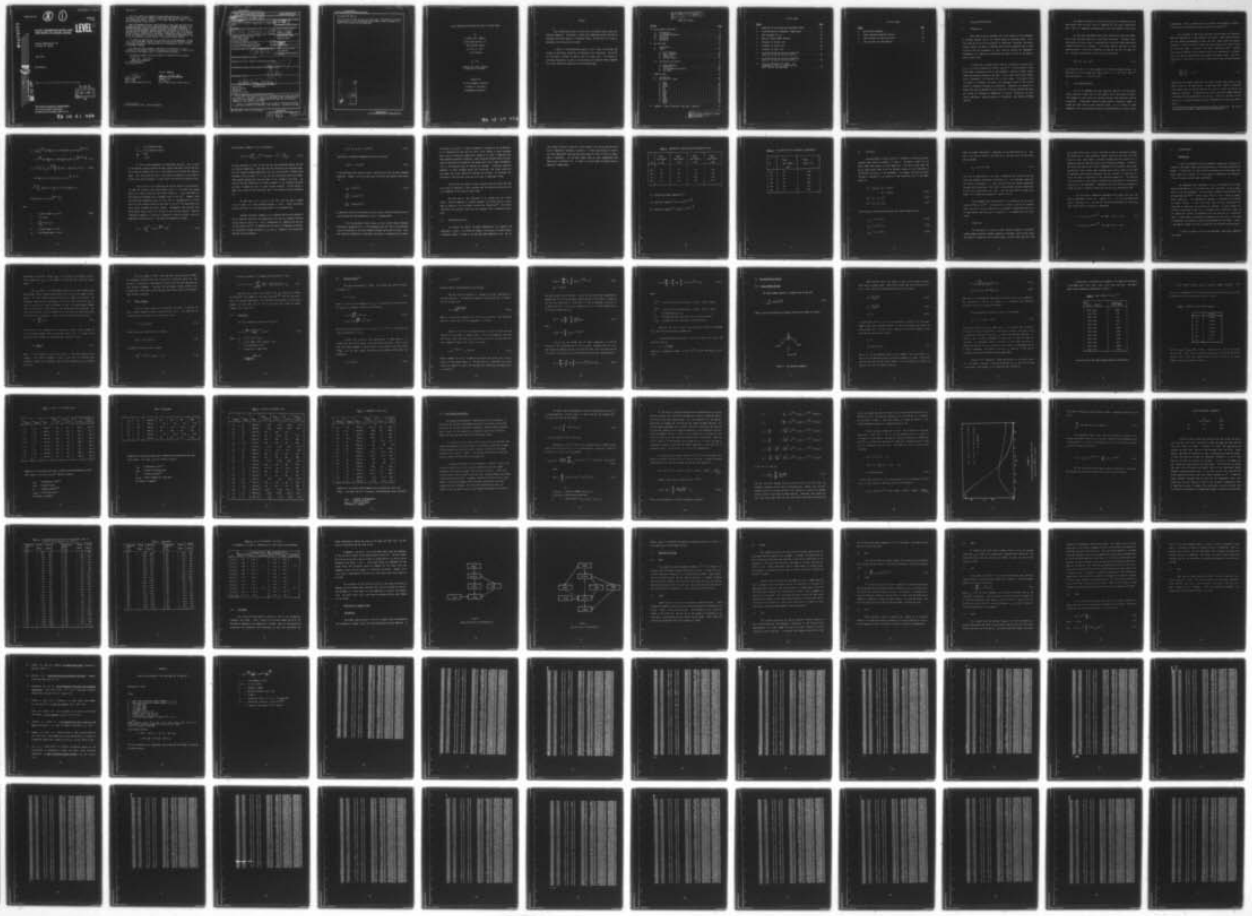

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H_2O-N_2 TRANSITION RATES AND LINE SHIFTS OF WATER VAPOR

Science Applications, Inc.
La Jolla, CA 92037

July 1979

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AIR FORCE WEAPONS LABORATORY
Air Force Systems Command
Kirtland Air Force Base, NM 87117

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H_2O-N_2 TRANSITION RATES AND LINE SHIFTS OF WATER VAPOR

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A. N_2-H_2O DEACTIVATION RATE

I. INTRODUCTION

Water vapor plays an important role in the response of the atmosphere to infrared radation, due to its intense system of absorption bands. Water also proves to be an efficient absorber of vibrational, rotational, and translational energy, and tends to dominate equilibriation processes such as that resulting from the propagation of laser radiation through the atmosphere. Consequently it is important to understand the kinetics as well as the spectroscopy of water vapor.

In particular, the deactivation rate of vibrationally excited N_2^* by H_2O is of critical importance to kinetic cooling.[1] In this process, a laser pulse causes a transient cooling of the atmosphere, leading to thermal lensing rather than thermal blooming of the beam. The CO_2 laser pulse induces transitions in atmospheric CO_2 from the (100) to (001) states. The CO_2(001) level is roughly in resonance with N_2(1), and consequently most of the CO_2(001) energy is resonantly absorbed by N_2 molecules. Atmospheric N_2 serves as an energy sink and the depleted CO_2(100) levels are filled by translational energy, leading to a decrease in temperature or cooling. Eventually, the N_2(1) levels deactivate, returning energy to translation, and heating overcomes cooling.

The degree and duration of the cooling process are determined by the deactivation rate of $N_2(1)$, which is dominated by the N_2-H_2O deactivation rate. Thus it is important to understand the collision dynamics of H_2O and N_2.

We note that experimental water vapor deactivation rates are anomalously large, even when there are no vibrational resonances. In general, measured values are several orders of magnitude more rapid than those predicted by standard theories of VV exchange. Since these theories work well for most other molecules, it would be interesting to know why they fail for water vapor. We have calculated the collision rate for the process

$$N_2^*O + H_2O \rightarrow N_2 + H_2O^*. \tag{1.1}$$

Our predicted rate is in good agreement with recently measured values. In particular, at 300^0 Whitson and McNeal found $K = .3 \times 10^6$ sec^{-1} atm^{-1},(2) while we predict $K = 1 \times 10^6$ sec^{-1} atm^{-1}.

II. COLLISIONAL MECHANISM

Due to its asymmetry and large rotational energies, the roto-vibrational structure of water vapor is very complex, and in fact there are transitions between VR levels which are resonant with most other molecular infrared transitions. Conventional theories either neglect rotational changes, or assume that they satisfy dipole selection rules. It is a result of these assumptions that H_2O deactivation rates are under-estimated by several orders

of magnitude. There is evidence that in collisons, large changes of rotational motion occur, and therefore should be taken into account.[3,4]

For our model of the N_2-H_2O collision we have chosen an interaction potential dominated by a large repulsive core term. Other possible choices are long ranged electromagnetic forces, and short ranged attractive chemical potentials. Direct calculation shows that long ranged forces cannot account for the large rates, in spite of the longer interaction time.* Chemical forces are not expected to be relevant to the N_2-H_2O deactivation. A comparison of D_2O and H_2O deactivation rates supports the above choice. For collisions with CO, the ratio of D_2O and H_2O deactivation rates has been measured as[5]

$$\frac{K_{D_2O - CO}}{K_{H_2O - CO}} \sim 7 \times 10^{-2} \qquad (2.1)$$

Because the long ranged interactions are highly resonant, they predict a much smaller value for the above ratio. On the other hand, chemical interactions would imply a ratio of the two rates to be close to 1, since H_2O and D_2O are chemically identical. Therefore we are led to the short ranged repulsive interactions for the deactivation of CO by H_2O. Since N_2 is similar in structure to CO, we likewise choose repulsive interactions for the N_2-H_2O deactivation.

*A calculation was made using the dipole-quadrupole interaction. The resulting rate was four orders of magnitude less than experiment.

The inter-molecular interaction potential is assumed to be a sum of atom-atom potentials of the form

$$V = V_{NH}(r_1) + V_{NH}(r_2) + V_{NH}(r_3) + V_{NH}(r_4) + V_{NO}(r_5) + V_{NO}(r_6) \tag{2.2}$$

where the V_i are atom-atom Morse potentials

$$V(r) = D\,(e^{-r/a} - 2e^{-r/2a}) \tag{2.3}$$

Morse potential forms were used because they were more convenient in determining the classical path.[6] The parameters D and a were determined by fitting the Morse potential to a Lennard-Jones potential, weighted over the repulsive region of interaction. The r_i in (2.2) are interatomic distances, and are re-expressed in terms of the separation of the molecular centers of mass R, vibrational, and rotational coordinates.

To specify the orientations, we choose the intermolecular axis as the polar axis. Then the H_2O orientation is given by two angles (θ_2, ϕ_2), and the N_2 orientation by one angle (θ_1). The use of these angles rather than coordinates based on a space-fixed frame leads to a helicity representation for the angular momentum. This representation is convenient when coupling between rotational and orbital angular momentum is neglected,[7] which is generally a good approximation. The transformation of the Hamiltonian from a space fixed representation to the helicity representation introduces terms which couple orbital and rotational angular momentum, giving rise to a large number of

coupled equations. The coupling terms as well as the orbital term are proportional to R^{-2}. Assuming a range for these interactions to be on the order of $10A^{o}$, the effective time scales for orbital and rotational motions are

$$\tau_{ORB} \sim 80 \times 10^{-14} \text{ s} \tag{2.4}$$

$$\tau_{ROT} \sim 62/J \times 10^{-14} \text{ s}$$

For most of the states important to N_2-H_2O VV exchange, $J > 6$, and $\tau_{ROT} >> \tau_{ORB}$, resulting in small orbital-rotational coupling. Thus we neglect the coupling terms. This approximation leads to an unperturbed Hamiltonian which is diagonal in the space of states which consists of the relative, vibrational, orbital, and rotational motions.

In the helicity representation, the potential (2.2) is of the form

$$V = V(R, q^{N_2}, q_v^{H_2O}, \theta_1, \theta_2, \phi_2) \tag{2.5}$$

We retain only the parts important to relative motion and $N_2(1) \rightarrow H_2O(010)$ exchange:

$$V_{eff} = V_0 + V_1 \tag{2.6}$$

$$V_U = D_{NH} \left\{ e^{\frac{-R}{a}} \cosh\left(\frac{\ell}{2a} \cos\theta_1\right) \cosh\left(\frac{x}{a} \cos\phi_2 \sin\theta_2\right) e^{\frac{y}{a} \cos\theta_2} \right.$$

$$\left. - 2\, e^{\frac{-R}{2a}} \cosh\left(\frac{\ell}{4a} \cos\theta_1\right) \cosh\left(\frac{x}{2a} \cos\phi_2 \sin\theta_2\right) e^{\frac{y}{2a} \cos\theta_2} \right\} \quad (2.7)$$

$$V_1 = q_2^{N_2} q_2^{H_2O} D_{NH} \left\{ e^{\frac{-R}{a} \frac{m_{H_2O}}{m_U}} \left(\frac{\ell}{2a} \cos\theta_1\right) \left(\frac{y}{2a} \cos\phi_2 \sin\theta_2\right) \right. \quad (2.8a)$$

$$\sinh\left(\frac{\ell}{2a} \cos\theta_1\right) \sinh\left(\frac{x}{a} \cos\phi_2 \sin\theta_2\right) e^{\frac{y}{a} \cos\theta_2}$$

$$- e^{\frac{-R}{a} \frac{m_U}{m_{H_2O}}} \left(\frac{\ell}{2a} \cos\theta_1\right) \left(\frac{x}{2a} \cos\theta_2\right) \sinh\left(\frac{\ell}{2a} \cos\theta_1\right)$$

$$\left. \cosh\left(\frac{x}{a} \cos\phi_2 \sin\theta_2\right) e^{\frac{y}{a} \cos\theta_2} \right\}$$

Here

$$\ell = N_2 \text{ bond length} = 1.108\ A^U \quad (2.8b)$$

$$x = d \sin\theta_U/2$$

$$y = \frac{m_U}{m_{H_2O}} d \cos\theta_U/2$$

$$d = OH \text{ bond length} = .97\ A^U$$

$$\theta_U = H_2O \text{ bending angle} = 103.9°$$

θ_1 = N_2 orientation angle

θ_2, ϕ_2 = H_2O orientation angles

D_{NH} = 63°K

a = .24 A°

In (2.6) we have neglected N-O interactions entirely. This is valid to ten percent accuracy because the heavy oxygen atom stays close to the center of mass and samples much less of the potential surface than the lighter H atoms. Also, the attractive part of the transition potential V_1 has been neglected since the VR exchange is largely due to the repulsive interaction term.

The V_0 part of (2.6) determines the relative motion of the molecules. We make the classical path approximation, which is valid when the energy defect ΔE is small relative to the kinetic energy E_k. In our case there are contributing VR exchanges with ΔE anywhere from 0 to 500 cm^{-1}. However, since the transition probability given by (2.9) falls off exponentially as a function of ΔE with effective width on the order of 200 cm^{-1}, the transitions with large energy exchange have small weight. Consequently the classical path approximation should give a fair picture of the collision process. Then the interaction potential is given as a function of time by $V_1(R(t))$, with $R(t)$ determined classically by V_0. The transition probability is then:

$$P_{if} = \frac{1}{\hbar}\left|\int_{-\infty}^{+\infty} \langle i|V_1|f\rangle\, e^{\frac{-i}{\hbar}\Delta E t}\, dt\right|^2 \qquad (2.9)$$

with the matrix element $\langle i|V_1|f\rangle$ is defined as:

$$\langle i|V|f\rangle = \langle \psi^{*H_2O}_{v_i J_i \tau_i} \; \phi^{*N_2}_i \; |V_1(R(t))| \; \phi^{N_2}_f \; \psi^{H_2O}_{v_f J_f \tau_f} \rangle \qquad (2.10)$$

The wave functions in (2.10) are for the H_2O roto-vibrational motion, and the N_2 vibration respectively. Note that both the vibrational and rotational dynamics are treated quantum mechanically for H_2O, and the matrix elements were evaluated using our model.[8] For N_2 only the vibrational motion was determined quantum mechanically and was taken to be a harmonic oscillator. N_2 rotation has been neglected in the above, because its N_2 rotational energies are small in comparison with all other relevant energies. Orbital motion is taken into account by the centrifugal term in the potential which determines $R(t)$.

We note that (2.9) is valid in the limit that the matrix element (2.10) is small, or single quantum exchange is valid. Direct calculation verifies that this is a very good approximation in the present case.

Although the matrix elements (2.10) determine the relative probability of a specific transition, the magnitude of the rate will depend critically on the classical path, $R(t)$. This is determined by V_0 together with the centrifugal term $\ell(\ell+1)/R^2$. An ambiguity arises since V_0 is dependent on molecular orientations through the angles θ_2, ϕ_2, and θ_1. Generally, one simply averages the relative potential

$$V_0 (R, \theta_2, \phi_2, \theta_1) - \ell(\ell+1)/R^2 \tag{2.11}$$

resulting in a potential dependent only on R of the form

$$\langle i|V_0|i\rangle - \ell(\ell+1)/R^2 \tag{2.12}$$

If the molecules were rotating rapidly, they would see such an angle averaged potential. However, for N_2-H_2O hard core collisions the relative time scales are:

$$\tau_{COLL} \sim 2x10^{-14} \text{ s} \tag{2.13}$$

$$\tau_{ROT}^{H_2O} \sim 62/Jx10^{-14} \text{ s}$$

$$\tau_{ROT}^{N_2} \sim 6400/Jx10^{-14} \text{ s}$$

We therefore see that the molecules are not rapidly rotating during the collision and that the path determined by (2.12) is inappropriate.

Since the molecules rotate slowly, we use a steric factor averaging technique to determine R(t). In this approach (θ_2^0, ϕ_2^0) refer to a particular initial orientation of H_2O which remains constant during the collision. After the transition probability is evaluated, the result is averaged over all possi-

ble values of (θ_2^o, ϕ_2^o). A similar procedure is followed for the N_2 molecule. It is interesting to note that the steric factor method of angle averaging gives rise to transition probabilities larger by an order of magnitude than that obtained by potential averaging. When transition probabilities are calculated as functions of orientation, the angles which lead to deep interpenetration of the molecules tend to dominate the average. Conversely, when the potential is angle averaged before the calculation, the larger potentials associated with lesser penetration dominate the average. As indicated, the difference in the resulting rates can be an order of magnitude or more.

The fact that the method of angle averaging used can affect the rate by an order of magnitude or more indicates that the reaction rates are critically dependent on the classical path chosen.

The last step in the calculation is to average over all initial states. Relative momentum is Boltzman averaged, and orbital motion is averaged by treating ℓ as a continuous variable and integrating.[6] The initial vibrational and rotational states are also averaged using a Boltzman distribution.

III. COMPUTATIONAL RESULTS

The results for several different temperatures are compared with experiment in Table I. Our values are roughly 3 times that of the most recently measured values in column 2, and show the same temperature rise. Our re-

sults agree to within a factor of 2 with column 3, but do not show the rapid rise in temperature indicated in column 4. In every case except for column 4 near room temperature, the predicted rates agree to within an order of magnitude of experiment. We find much larger rates at lower temperatures than those given in reference (11). In Table II, we give some calculated values at atmospheric temperatures.

TABLE 1. COMPARISON OF CALCULATED AND EXPERIMENTAL RATES

T ^{o}K	K_{calc} ($sec^{-1}atm^{-1}$) x 10^6	K_{exp}^{A} ($sec^{-1}atm^{-1}$) x 10^6	K_{exp}^{B} ($sec^{-1}atm^{-1}$) x 10^6	K_{exp}^{C} ($sec^{-1}atm^{-1}$) x 10^6
300	1.0	.30	.45	.08
500	1.9	.35	.85	.43
700	2.8	.54	1.22	1.10
900	3.7	.83	1.56	2.07

K_A = Whitson and McNeal experiment [2]

K_B = empirical formula[9] $2.557 \times 10^{7} e^{-27.0T^{-\frac{1}{3}}}$

K_C = empirical formula[10] $2.878 \times 10^{9} e^{-69.9T^{-\frac{1}{3}}}$

TABLE 2. CALCULATED RATES AT ATMOSPHERIC TEMPERATURES

T °K	K_{CALC} (sec^{-1} atm^{-1}) $x10^6$	K_{CALC} (sec^{-1} T^{-1})
200	.61	802
220	.67	882
240	.74	974
260	.81	1070
280	.89	1170
300	.97	1280

IV. DISCUSSION

The predictions of kinetic cooling in reference (1) used N_2-H_2O deactivation rates similar to column 4 in Table 1. We predict a rate 10 to 15 times larger than column 4 at room temperature. With such a large rate, the N_2-H_2O deactivation tends to be the dominant process for the relaxation of vibrationally excited N_2 in the atmosphere. For example, the three processes included in reference (1) as effective in the relaxation of N_2^* in the atmosphere are:

$$N_2^* + CO_2(000) \rightarrow N_2 + CO_2(001)$$
$$\rightarrow N_2 + CO_2(020) \qquad (4.1a)$$

$$N_2^* + O_2 \rightarrow N_2 + O_2^* \qquad (4.1b)$$

$$N_2^* + H_2O \rightarrow N_2 + H_2O^* \qquad (4.1c)$$

The time scales for the three processes were chosen respectively as:

$$\tau_{CO_2} = 1.4 \times 10^{-2} \text{ s} \qquad (4.2a)$$

$$\tau_{O_2} = 3.2 \times 10^{-2} \text{ s} \qquad (4.2b)$$

$$\tau_{H_2O} = 1.2 \times 10^{-2} \text{ s} \qquad (4.2c)$$

These are roughly equivalent in importance in the deactivation of N_2^*. However, if we use our value for the rate (4.2c), the time scale for the latter process becomes

$$\tau_{H_2O} = 8.0 \times 10^{-4} \text{ sec} \tag{4.3}$$

Thus, the H_2O deactivation is an order of magnitude more effective than the other two processes considered in reference (1). This dominance simplifies the analysis considerably. It turns out that both the maximum temperature decrease and the duration of the kinetic cooling become inversely proportional to the N_2-H_2O deactivation rate alone. Thus the predictions of these parameters in (1) should be decreased by a factor of 10-15.

These parameters have been measured in an observation of the kinetic cooling effect by Sica[9]. He found that in order to explain his measurements, the rate of N_2-H_2O deactivation at atmospheric temperatures had to be 12 times greater than that used in reference (1), in agreement with our calculation.

V. CONCLUSION

The calculation of collision rates involving change of vibrational quantum numbers generally assumes reasonant VV exchange, with an angle averaged potential determining the classical path. We have found that the large

N_2-H_2O deactivation rate is due to rotational as well as vibrational exhange. The possibility of large rotational changes induced by hard core collisions leads to a very large number of resonant exchange reactions, tending to increase the reaction rate over that of pure vibrational exchange. In addition, the result was found to be critically dependent on the classical path chosen. Specifically, steric factor angle averaging gives results larger by an order of magnitude than potential averaging, and was necessary in predicting correctly the order of magnitude of the transition probability. The resulting rate is found to be large enough to dominate the deactivation of vibrationally excited N_2 in the atmosphere. Consequently both the duration and degree of kinetic cooling is inversely proportional to the N_2-H_2O deactivation rate.

Our rate shows a temperature dependence which agrees very well with that of references (2) and (10). However, for T > 800 our rise agrees with that in reference (11). We give the following approximation to the N_2-H_2O deactivation rate as a function of temperature:

$$K = 2.557 \times 10^{7} \, e^{-27.0T^{-\frac{1}{3}}} \ cm^{-1} \ atm^{-1} \quad (\text{for } T < 750) \qquad (5.1)$$

$$K = 2.878 \times 10^{9} \, e^{-69.9T^{-\frac{1}{3}}} \ cm^{-1} \ atm^{-1} \quad (\text{for } T > 750)$$

B. H_2O BAND MODELS

I. Introduction

To deal with problems involving atmospheric absorbtion or emission of radiation, band models describing the absorbtivity of individual molecules are needed. In particular, for cases involving transmission of high energy laser beams, models are required for a wide range of temperatures and pressures. Line by line models satisfy these requirements.

The parameters which determine a line by line model can be either measured experimentally, or calculated from first principles. We use a combination of the two approaches. The band model parameters are determined from the Multimode Model[8,12] for water vapor, which in turn is based on experimental quantities. This semi-empirical approach is expected to be valuable for several reasons. In the first place, pure ab-initio calculations are inaccurate in predicting line positions and strengths. By using a model consisting of experimental input into a structure with a theoretical basis, we can combine the accuracy of experiments with the simplicity of a theoretical model. A model based on experiment is expected to be valid only in the range of temperature and pressure at which the experiments were performed. Finally, a semi-empirical model can serve as a guide for building more accurate models.

In order to create a line by line band model, three major components are needed:

1. Line positions
2. Line strengths
3. Line widths

The line positions are determined directly from the Multimode Model for Water Vapor.[8,12] As is well known, the detailed molecular structure of H_2O presents unusual difficulties as water displays extreme centrifugal distortion, vibrational anharmonicity, as well as Fermi resonances and other types of mode-mode interactions. These features dominate the molecular characteristics of H_2O, not only qualitatively but quantitatively, and are reflected in the roto-vibrational energy levels and wave functions. Consequently they will significantly affect the transition dipole moments, level positions, and line intensities. The multimode model takes these features into account and thus should form the basis for a useful band model.

The line intensities are found by evaluating matrix elements of the dipole operator between wave functions generated by the multimode model. The wave functions are of the form:

$$x_{\nu J_\tau M} = \sum_{m,K} C_{mK}^{\nu J_\tau} \, |m\rangle \, |JKM\rangle \qquad (1\text{-}1)$$

Here $C_{mK}^{\nu J_\tau}$ is determined by diagonalizing the quantum mechanical Hamiltonion between the basis states $|m\rangle$ and $|JKM\rangle$, where $|m\rangle$ is a product of three Morse oscillator basis functions representing the stretch, bend, and asymmetric stretch modes, and $|JKM\rangle$ is a symmetric rotor wave function.

Finally, the line widths at atmospheric pressures are assumed to be dominated by collision broadening. Thus one needs to know how H_2O interacts with other molecules. We note that collisional interactions also cause a small shift to occur in the line positions. Both the broadening and the shifts can be obtained from Anderson's[13] theory of collision broadening which will be discussed below.

II. Theory

IIA. Dipole Operator

The dipole operator is a function of rotational and vibrational coordinates. We expand in a Taylor series about the three vibrational coordinates q_1, q_2, q_3 as follows:

$$\mu = \mu_{000} + \mu_{100} q_1 + \mu_{010} q_2 + \mu_{001} q_3 + \mu_{200} q_1^2 + \cdots \qquad (2\text{-}1)$$

$$= \sum_{I,J,K} \mu_{IJK} q_1^I q_2^J q_3^K$$

Here the μ_{IJK} all depend on rotational coordinates in the usual manner. Note that the μ_{100}, μ_{010}, μ_{001} terms determine single quantum transitions in the stretch mode, bending mode, and asymmetric stretch modes, respectively. Due to anharmonicity and mixing of modes this separation is not clear, in that there will be small contributions to bending mode transitions from all μ_{IJK} with $(IJK) \neq (010)$. This mixing complicates the determination of μ_{IJK} from

experimental quantities, because μ_{000} is not exactly the measured electric dipole moment and μ_{010} is not exactly the bending mode transition dipole moment.

The μ_{IJK} were fit to experimental quantities in two different ways. Both methods involve truncating the series (2-1) to limit the number of parameters. The first method involves calculating a number of individual line strengths, comparing with experimental line shifts, and varying the μ_{IJK} in order to minimize the difference between the two. The second method assumes that VR coupling has a small effect on the integrated band intensities. Neglecting VR coupling, one can diagonalize the rotational and vibrational parts of the Hamiltonian separately. Taking only the vibrational wave functions

$$|V\rangle = \sum_m D_m^v |m\rangle \qquad (2\text{-}2)$$

one arrives at the integrated band intensity by using a matrix element of (2-1) evaluated between purely vibrational states (2-2). In terms of the resulting matrix element, the integrated band intensity is just

$$S_v^o = \frac{8\pi^2 \nu |\mu|^2}{3hc} \qquad (2\text{-}3)$$

where ν is the frequency at band origin and μ is the dipole moment matrix element. The fitting procedure is now to use (2-3) to calculate band strengths, compare with experiment, and vary the parameters μ_{IJK} to minimize the error.

The first method is used in the code LINE, and the second in BAND. The parameters derived from line fitting give intensities which are very accurate in the region of the spectrum in which the lines were measured, but less accurate elsewhere. The band fitting method, though slightly less accurate due to the neglect of VR coupling, gives results which are consistent over the entire spectrum.

IIB. Matrix Elements

Once the dipole operator is determined, one needs to evaluate the matrix element between VR wave functions such as (1-1). For simplicity we consider the matrix element of a single term in (2-1),

$$\mu' = \mu_{IJK}\, q_1^i\, q_2^j\, q_3^k \tag{2-4}$$

denote by D_{mn} the vibrational matrix element

$$D_{mn}^{ijk} = \langle m|\, q_1^i\, q_2^j\, q_3^k\, |\, n \rangle \tag{2-5}$$

and $E_{K'K}^{J'J}$ the rotational matrix element

$$E_{K'K}^{J'J} = \langle J'\, K'\, M|\, \mu\, (\theta_{ROT})\, |\, J\, K\, M\rangle \tag{2-6}$$

The matrix element of μ' between VR wave functions is then

$$\langle v'J'\tau' |\mu'| vJ\tau\rangle = \sum_{m,n,K,K'} C^{*v'J'\tau'}_{m,K'} D^{IJK}_{mn} E^{J'J}_{K'K} C^{vJ\tau}_{nK} \mu_{iJK} \qquad (2\text{-}7)$$

The matrices D and E are known from the theories of Morse oscillators[14] and symmetric top rotor functions,[15] and the matrices C arise from the Multimode Model. One multiplies the matrices to yield each element, and then sums over all IJK to give the total transition moment between $|v'J'\tau'\rangle$ and $|vJ\tau\rangle$.

IIC. Intensities

The line strengths are given by the relation

$$S = (1-e^{\frac{-hc\nu}{kT}}) \frac{8\pi^3 N_o \nu |\mu|^2}{3hc} P \quad cm^{-2}atm^{-1} \qquad (2\text{-}8)$$

where $N_o = 2.692 \times 10^{19} (T_{STP}/T)$

$|\mu|$ = dipole moment matrix element in esu

ν = line frequency in cm^{-1}

P = occupation of lower state

$$= \frac{g\,(2J+1)e^{-E_{vJ\tau}/KT}}{Q}$$

IID. Anderson Theory[13]

The impact approximation is made. This assumes that most collisions are binary, i.e.,

$$Z \ll 1/\tau_{coll} \tag{2-9}$$

where Z is the collision frequency and τ_{coll} is the duration of one collision. For N_2-H_2O, at atmospheric temperature and pressure,

$$Z \sim N d^2 \sqrt{\frac{KT}{m}} \sim 10^9 \text{ sec}^{-1} \tag{2-10}$$

$$1/\tau_{coll} \sim \frac{1}{d} \sqrt{\frac{KT}{m}} \sim 10^{12} \text{ sec}^{-1}$$

One can see from the above for d = 3 A°, N ~ 2.7 x 10^{19}, M = 10.96 amu, the impact approximation is valid.

Secondly, the classical path approximation is made, where it is assumed that the relative motion can be described classically. This is valid when the energy exchange or energy defect is much smaller than the kinetic energy. For the long ranged interactions which dominate collisional line broadening,

$$\Delta E \ll 100 \text{ cm}^{-1} \tag{2-11}$$

$$E_k \gtrsim 200 \text{ cm}^{-1}$$

and the classical path approximation can be used.

Thus the relative separation is assumed to be well described by a classical path, R(t). One generally assumes an addition that R(t) is essentially the straight line

$$R(t) = \sqrt{b^2 + v^2t^2} \tag{2-12}$$

where b is the impact parameter and v the relative velocity. The interaction potential is then implicitly time dependent, v = v(R(+)).

Details on how the line broadening and line shifts result from the interaction can be found in numerous works. The line broadening arises from the virtual transitions which occur during the collision, and the shifts are due to changes in phase. The S matrix is given by

$$S = e^{-A(w,b,v)} = e^{-1/2\Gamma + i\phi} \tag{2-13}$$

where A depends on b and v through the classical path (2-12), and is also a function of the energy defect w. The real part of A determines the virtual transition probability, while the imaginary part determines the phase shift. Γ is given by

$$\Gamma_n(b,v) = \sum_m \left|\frac{1}{\hbar} \int_{-\infty}^{\infty} V_{nm}(t)\, e^{-i\omega_{nm}t}\, dt\right|^2 \qquad (2\text{-}14)$$

$$V_{nm} = \langle n|V|m\rangle$$

One readily sees from (2-14) that Γ is just the sum of the Born approximation probabilities for all the possible transitions out of the state n, induced by the collision interaction V. Since A(w) is a sum of holomorphic functions of w, whose real part is $1/2\Gamma$, the imaginery part of A is given essentially by the Hilbert transform of $\Gamma(w)$:

$$\phi_n(b,v) = \frac{1}{2\pi} \sum_m P \int_{-\infty}^{\infty} \frac{\Gamma_{nm}(w)}{\omega_{nm} - w}\, dw \qquad (2\text{-}15)$$

where

$$\Gamma_{nm}(w) = \left|\frac{1}{\hbar} \int_{-\infty}^{\infty} V_{nm}(t)\, e^{-iwt} dt\right|^2$$

Finally, one must average over all impact parameters, all relative velocities, and the populations of initial states. Assuming that $\Gamma \ll 1$, i.e., the transition probabilities per collision are small, the line width and the line shifts for the state n of H_2O perturbed by N_2 are given respectively by

$$\Delta\Gamma_n = \sum_{J_2} N \int_0^{\infty} bdb \int_0^{\infty} vdv\, F(v)\, \Gamma_n^{J_1 J_2}(b,v)\, P(J_2) \qquad (2\text{-}16)$$

$$\Delta E = h \sum_{J_2} N \int_0 bdb \int_0 vdv\, F(v)\, \phi_n^{J_1 J_2}\, P(J_2) \qquad (2\text{-}17)$$

where:

$\Gamma_n^{J_1 J_2}$ is eq. (2-14) for the case $N_2(J_1) + H_2O(n) \rightarrow H_2O(n) + N_2(J_2)$

$\phi_n^{J_1 J_2}$ is eq. (2-15) for the case $N_2(J_1) + H_2O(n) \rightarrow H_2O(n) + N_2(J_2)$

N is number density of N_2

$F(v)$ is Maxwell-Boltzman distribution for relative velocities

$P(J_2)$ is probability for finding N_2 in rotation state J_2

Note that the initial states of N_2 and relative motion are averaged over, while the final states are summed over.

Dividing through by the factor c for (2-17) and hc for (2-18), and using the relation

$$N = N_o \frac{273.16}{T}$$

where N_o is Lochschmitts number ($\sim 2.69 \times 10^{19}$), we get the results in cm^{-1} atm^{-1}.

III. Calculations and Results

IIIA. Dipole Moment Operator

The dipole moment operator is assumed to be of the form

$$\mu = \sum_{ijk} \mu_{ijk} q_1^i \, q_2^j \, q_3^k \qquad (3\text{-}1)$$

where q_i are the vibrational coordinates defined with respect to Figure 1:

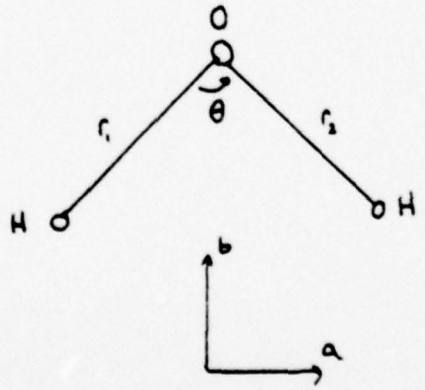

FIGURE 1. H_2O molecular geometry

When vibrations occur, the lengths r_1 and r_2 and the angle fluctuate about certain average values. Denoting the change from rest positions as δr_1, δr_2, $\delta\theta$, the vibrational coordinates used here are as follows:

$$q_1 = \frac{\delta r_1 + \delta r_2}{2r_1} \tag{3-2a}$$

$$q_3 = \frac{\delta r_1 - \delta r_2}{2r_1} \tag{3-2b}$$

$$q_2 = \delta\theta \tag{3-2c}$$

An approximate form for (3-1) can be obtained by assuming that the dipole moment arises from a charge imbalance of -2q on the oxygen atom, and +q on each hydrogen atom. Then the b and a components of the dipole moment for the rest position can be easily derived:

$$\mu_a = 0$$

$$\mu_b = 2rq \cos(\theta/2) \tag{3-3}$$

Now μ_b is just the measured electric dipole moment of the H_2O molecule, μ_o. Thus q can be determined since the molecular geometry is known. Using (3-2) and the definition of the dipole moment, it is now possible to obtain the relation (3-1) to first order in the q;'s:

$$\mu_a = \frac{M_{H_2O}}{M + 2m \sin^2 (\theta/2)} \tan \frac{\theta}{2} \mu_o q_3 \qquad (3\text{-}4a)$$

$$\mu_b = \mu_o + \mu_o q_1 - \frac{1}{2} \tan \frac{\theta}{2} \mu_o q_2 \qquad (3\text{-}4b)$$

Note that μ_a is antisymmetric under special inversion, while μ_b is symmetric. This conclusion is true for all orders of q. Therefore, the rotational selection rules for μ_a and μ_b are different.

Using experimental values for μ_o and θ, (3-4b) becomes

$$\mu_b = 1.86 + 1.86q_1 - 1.19q_2 \qquad (3\text{-}5)$$

Note that the signs of the u_{ijk} terms vary. If the molecule was a rigid rotor, with no mixing of modes due to centrifugal distortion, the signs of the μ_{ijk} would be irrelevant, since each $|\mu_{ijk}|^2$ would be measured separately. In reality, there is strong interference in many cases, so that the signs are important. For fundamental modes of vibration, if centrifugal distortion is present and the sign of μ_{ijk} is positive, the R branch is strengthened and the P branch is weakened. The reverse is true for μ_{ijk} negative. In the case of hot bands the distortion effects are more complicated.

Equation (3-5) rperesents a rough approximation to the dipole operator. As stated in Section II, we have determined the μ_{ijk} either by fitting to individual line strengths, or to integrated band intensities.

In particular, we consider as an example of our model the interaction of the modes (000), (010), (020), (100), (110), (120), and (001). The experimental band strengths are given below in Table 3:

TABLE 3. BAND STRENGTHS FOR H_2O [16]

Band $(r_1 r_2 r_3) \rightarrow (r_1' r_2' r_3')$	Transition Dipole Moment
(000) (000)	1.8546
(010) (020)	.171
(000) (010)	.121
(010) (100)	.0167
(000) (020)	.007
(010) (110)	.0149
(000) (100)	.0149
(010) (011)	.0708
(000) (001)	.0708
(010) (120)	.004
(000) (110)	.0028
(000) (120)	.00112

The exact form of the dipole moment operator considered was

$$\mu = \mu_{000} + \mu_{100}q_1 + \mu_{010}q_2 + \mu_{001}q_3 + \mu_{110}q_1q_2 + \mu_{020}q_2^2 + \mu_{120}q_1q_2^2 \qquad (3\text{-}6)$$

This gave 7 parameters for 12 pieces of data, and the results of the fitting procedures for this simple case are given in Table 4.

TABLE 4. EMPIRICAL DIPOLE MOMENT OPERATOR

	(Debyes)
μ_{000}	1.851887
μ_{100}	.457962
μ_{010}	-.781140
μ_{110}	-.497356
μ_{120}	-.789012
μ_{020}	.014259
μ_{001}	1.4277

Note that μ_{100} and μ_{010} agree in order of magnitude with (3-5), and the signs are the same. Thus one can understand the deviation of the H_2O absorbtion spectrum from a rigid rotor spectrum qualitatively in terms of the simple geometric model of H_2O shown in Figure 1.

IIIB. Intensities

The intensity for a particular transition is given by the following relation:

$$I = N_o P(T_{STP}/T)(1 - e^{-\frac{hcr}{kT}}) \frac{8\pi^3 r|\mu|^2}{3hc} \text{ cm}^{-2}\text{atm}^{-1} \qquad (3\text{-}7)$$

where N_o = Lochschmidt's number

r = line frequency in cm^{-1}

$|\mu|^2$ = dipole moment

T_{STP} = 273.16°K

P = Boltzman distribution function for lower state

$= g\,(2J+1)e^{-Ejr/KT}\,Q^{-1}$

We also give the dipole moment matrix element,

$$S = |\mu|^2 (2J+1) \qquad (3\text{-}8)$$

$|\mu|^2$ in units of $(\text{debyes})^2$

Given S one can calculate the line intensity for any temperature using (3-7).

S is determined by multiplying through the matrices C^+, D, C, and E as in (2-7). C represents the VR wave function, D the matrix of the q's, and

E is the matrix of the rotational coordinates. We note that since H_2O belongs to the point symmetry group C_{2v}, the matrix E factorizes into 4 blocks. If this is taken into account, the multiplication process can be speeded up by a factor of $(4)^2 = 16$.

In Tables 5, 6, and 7, we list the matrix elements S in (3-8) for various transitions in the (010) band of water vapor. The results are compared with experimental measurements of individual line strengths,[17] results due to Benedict,[18] and the "rigid rotor" line strengths. The latter are calculated by neglecting the rotational mixing of modes due to centrifugal distortion. The "F factor" is obtained by dividing the real, centrifugally distorted values by the rigid rotor values. The F factors, which are related to the centrifugal distortion, are small near the band centers, and grow larger very rapidly as the distance from the band center increases. The original F-factor calculation assumed *mixing only* between the fundamental and ground state, while in our model mixing occurs between all the modes. For regions of the spectrum given in Table 5, the differences are not significant, but in the extreme wings of the spectrum there are order of magnitude differences. Line strengths for the region of 2200 cm^{-1} in the (010) band, are given in Table 7. Note that the F factors there are as small as 10^{-3}. Only a multimode model can accurately predict the intensities in these extreme regions.

TABLE 5. STRENGTHS FOR STRONG LINES

J_{τ} lower	J_{τ} upper	ν_{exp}	S_{exp} ($\times 10^{-4}$)	S_{calc} ($\times 10^{-4}$)	S_B ($\times 10^{-4}$)	S_{rigid} ($\times 10^{-4}$)
7_{-6}	6_{-6}	1455.28	899	873	1001	1019
5_{-2}	4_{-2}	1459.27	508	441	517	411
3_{1}	2_{-1}	1464.93	215	201	267	158
4_{-1}	3_{-1}	1472.06	389	370	443	335
6^{-5}	5^{-5}	1473.52	808	730	846	845
3_{0}	2_{0}	1487.35	352	320	391	285
6_{-3}	6_{-5}	1489.85	506	481	611	320
5_{-5}	4_{-3}	1496.26	600	567	668	669
2_{1}	1_{1}	1505.60	319	289	358	256

Comparison of calculated dipole matrix elements with experimental and rigid rotor values: (010) band, 1470 cm^{-1} (mostly P branch).

S_{exp} = experimental value[17]

S_{calc} = present results

S_B = previous results[18]

S_{rigid} = rigid rotor value

All values in $(debyes)^2$

TABLE 5 (concluded)

7_{-2}	8_0	1954.99	161	114	133	455
3_{-1}	4_3	1956.27	.16	.13	.20	1.06
7_{-4}	8_{-2}	1961.19	61.0	37.3	56.9	151.
6_2	7_2	1966.27	235	146	216	720
4_{-2}	5_2	1976.19	.95	.65	1.06	5.36
7_1	8_1	1988.41	220	140	212	700

Comparison of calculated dipole matrix elements with experimental and rigid rotor values: (010) band, 1900 cm^{-1} (mostly R branch).

S_{exp} = experimental value[17]

S_{calc} = present calculated value

S_B = previous results[18]

S_{rigid} = matrix element for rigid rotor

All values in $(debyes)^2$

TABLE 6. STRENGTHS FOR MEDIUM LINES

$J_{\tau_{lower}}$	$J_{\tau_{upper}}$	ν_{exp}	S_{exp} ($\times 10^{-4}$)	S_{calc} ($\times 10^{-4}$)	S_B ($\times 10^{-4}$)	S_{rigid} ($\times 10^{-4}$)
5_{-3}	5_3	1852.40	1.30	1.12	1.95	7.79
6_{-4}	6_2	1856.26	4.48	2.96	5.50	21.6
8_{-4}	9_{-4}	1858.55	511	555	673	
5_{-2}	6_0	1866.37	119	94.2	113	279
4_1	5_3	1869.34	198	166	241	564
9_{-5}	10_{-5}	1870.83	606	426	722	825
7_{-7}	7_{-1}	1876.61	2.14	1.43	3.47	11.6
5_{-4}	6_{-2}	1884.57	21.1	16.3	28.1	53.6
5_1	6_1	1889.58	224	161	242	547
5_0	6_2	1895.17	200	154	218	544
4_{-4}	5_0	1904.35	6.53	4.44	6.94	20.3
7_0	7_0	1907.96	238	158	248	529
6_{-3}	7_{-3}	1909.95	83.2	61.9	61.8	209
7_{-1}	8_{-1}	1922.33	226	163	257	522
6_{-1}	7_1	1923.16	177	137	184	510
8_{-8}	8_{-2}	1926.70	.79	.61	.83	19.6
8_{-2}	9_{-2}	1933.19	234	178	307	538
9_{-3}	10_{-3}	1941.63	323	207	372	588
6_{-5}	7_{-3}	1945.34	12.8	9.23	13.0	39.5
5_{-5}	6_{-1}	1946.35	7.46	5.02	8.20	26.9
6_{-5}	6_1	1951.15	.18	.10	.25	2.02

TABLE 7. STRENGTHS FOR WEAK LINES

J_{τ} lower	J_{τ} upper	ν_{exp}	S_{calc} ($\times 10^{-7}$)	S_B ($\times 10^{-7}$)	S_{rigid} ($\times 10^{-7}$)
9_{-6}	10_0	2307.03	34.9	219	9030
8_{-3}	9_3	2314.88	1.63	139	6880
9_{-5}	9_5	2324.71	4.60	15	187
9_{-8}	10_{-2}	2333.25	3.90	35	1450
7_{-7}	8_1	2333.37	.06	5.5	307
5_{-3}	6_5	2334.54	.05	.09	9.9
9_{-4}	10_2	2348.64	.52	223	10900
6_2	7_6	2352.20	2.41	6.6	395
6_1	7_7	2353.23	2.48	6.6	395
8_{-7}	8_3	2357.03	.36	.07	13.4
6_{-4}	7_4	2362.51	.42	.82	74
7_0	8_6	2378.52	9.38	24	1400
7_1	8_5	2375.07	8.67	24	1400
8_0	9_4	2394.90	18.4	57	3290
8_{-8}	9_0	2395.41	.76	6.9	388
7_{-5}	8_3	2396.97	1.77	3.3	261

Comparison of calculated dipole moments with calculated and rigid rotor values: (010) band, 2350 cm^{-1} (R branch). (No experimental results available.)

S_{calc} = present calculated value
S_B = previous results[18]
S_{rigid} = rigid rotor value
All values in $(debyes)^2$

IIIC. Line Broadening and Shifts

We assume that broadening is dominated by collision processes. In particular, we calculate the broadening and shifts of H_2O due to collisions with N_2 and O_2, the major atmospheric components. Anderson theory discussed above is used. All that remains is to choose the form of the interaction between the molecules which mediates the broadening process.

In the case of N_2 collisional deactivation by H_2O, we found that long ranged electromagnetic interactions were very ineffective deactivation agents. The long ranged interactions are highly resonant, leading to little energy transfer for the case $\Delta E \sim 760 cm^{-1}$. Only through the mechanism of hard core repulsive forces can significant VV exchange occur.

To determine the amount of line broadening in Anderson's theory, the transition probabilities to all possible neighboring states are summed. Consequently the nearest neighbor transitions will dominate. To deal with pure rotational transitions with relatively small energy exchange, long ranged interactions are sufficient. In general, hard core collisions lead to large energy, vibrational exchanges, while long range interactions cause small energy rotational exchanges. The collisional broadening and shifts of spectral lines are dominated by the long ranged electromagnetic interaction.

The lowest order electromagnetic interaction between H_2O and N_2 or O_2 is dipole-quadrupole. For this case, it is well known that the response function $r(w)$ resulting from the integral

$$r(w) = \left|\frac{i}{\hbar} \int_{-\infty}^{\infty} e^{-iwt}\, V(t)\, dt\right|^2 \tag{3-9}$$

is a sum of products of Kelvin functions.

Consequently, the collisional line broadening can be readily determined using (2-14) and (2-16). For dipole-quadrupole interaction, (2-14) for the level $|vJ\tau>$ of H_2O, J_2 of N_2 becomes

$$\Gamma_{vJ\tau,J_1}(b,v) = \frac{4G(w\tau)}{\hbar^2 v^2 b^6} \sum_{v'J'\tau',J_2} |<vJ\tau|\mu|v'J'\tau'>|^2 \; |<J_1|Q|J_2>|^2 \; C^2(J_1 2 J_2;00) \tag{3-10}$$

where

$$G(w\tau) = \sum_{\mu=-3}^{3} [(3+\mu)!\;(3-\mu)!]^{-1}\, (w\tau)^6\, K_\mu^2(|w\tau|) \tag{3-11}$$

τ = b/v

$<J_1|Q|J_2>$ = quadrupole moment for N_2 or O_2

$C(J_1 2 J_2;00)$ = Clebsh Gordon coefficient

w = energy defect = $E_{v'j'\tau'} + E_{J_2} - E_{vJ\tau} - E_{J_1}$

For the case of vibrational deactivation we neglected the N_2 rotation entirely, because the vibrational exchange was orders of magnitude greater than the N_2 rotational energy change. For line broadening all the possible transitions are summed over, and the smallest energy exchanges dominate. The smallest energy exchanges occur in purely rotational transitions, and thus the N_2 rotational energies can no longer be neglected. Since quadrupole selection rules are obeyed, the sum in (3-10) over J_2 ranges over a maximum of five values for each J_2, so this additional complication is not serious. When the initial states J_1 of the broadener are averaged over as in (2-16), the sum is truncated for those J_1 such that the thermal population is less than 10^{-9} of the ground state. This occurs for $J_1 < 100$ for most temperatures.

To calculate the response function (2-15) for the collisional line shifts, the Hilbert transform of (3-11) must be evaluated. Instead of working directly with (3-11) for this purpose, we used the least squares fit

$$G(x) = e^{-2x} (.1777 + .3519x + .3877x^2 + .2759x^3 + .1764x^4 + .1395x^5) \tag{3-12}$$

Denote I_k the Hilbert transform of $|w|^k e^{-2|w|\tau}$;

$$I_k(w_0) = \frac{1}{2\pi} P \int_{-\infty}^{\infty} \frac{|w|^k e^{-2|w|\tau}}{w_0 - w} \, dw \tag{3-13}$$

Then I_k can be expressed in terms of exponential integrals:

$$I_0 = \frac{1}{2\pi} \left[+e^{2w_0\tau} E_1(2w_0\tau) + e^{-2w_0\tau} E_i(2w_0\tau)\right]$$

$$I_1 = + \frac{w_0\tau}{2\pi} \left[-e^{2w_0\tau} E_1(2w_0\tau) + e^{-2w_0\tau} E_i(2w_0\tau)\right]$$

$$I_2 = - \frac{w_0\tau}{2\pi} + \frac{(w_0\tau)^2}{2\pi} \left[+e^{2w_0\tau} E_1(2w_0\tau) + e^{-2w_0\tau} E_i(2w_0\tau)\right]$$

$$I_3 = - \frac{w_0\tau}{4\pi} + \frac{(w_0\tau)^3}{2\pi} \left[-e^{2w_0\tau} E_1(2w_0\tau) + e^{-2w_0\tau} E_i(2w_0\tau)\right]$$

$$I_4 = - \frac{w_0\tau}{4\pi} - \frac{(w_0\tau)^3}{2\pi} + \frac{(w_0\tau)^4}{2\pi} \left[+e^{2w_0\tau} E_1(2w_0\tau) + e^{-2w_0\tau} E_i(2w_0\tau)\right]$$

$$I_5 = - \frac{3w_0\tau}{8\pi} - \frac{(w_0\tau)^3}{4\pi} + \frac{(w_0\tau)^5}{2\pi} \left[-e^{2w_0\tau} E_1(2w_0\tau) + e^{-2w_0\tau} E_i(2w_0\tau)\right]$$

In the limit of large $w_0\tau$,

$$I_k \sim \frac{1}{2^k w_0\tau} \sum_{S=0} \frac{(k + 2s)!}{(2w_0\tau)^{2s}} \qquad (3\text{-}15)$$

Thus the line shift response function drops off only as 1/w, while the line broadening response function falls off exponentially. However, the line shift response function is an odd function of w_0, leading to a cancellation between terms of positive and negative energy defects, Therefore, even though $\Phi(w)$ has a much wider range than $\Gamma(w)$, the level shifts and widths resulting from

(2-16) are roughly the same size since $\Gamma(w)$ is an even function and $\phi(w)$ is an odd function of w. The velocity averaged ϕ and Γ as functions of $x = wb\sqrt{M/2KT}$ are pictured in Figure 2. Note that though Γ is larger for small w, it decreases exponentially while ϕ is decreasing only as 1/w.

Finally, we must average over v and b. The integral over v was done numerically. Since $\Gamma(b) \to \infty$ for $b \to 0$, the assumption that Γ is small is invalidated in that region. We used an averaging process due to Sharma and Srau[19] to eliminate the necessity of numerically integrating over b using the full exponential form for (2-16). We assume that $\Gamma(b,v)$ is given by the following:

$$\Gamma(b) = \Gamma(b) \sim 1/b^6 \qquad b>d$$

$$\Gamma(b) = \Gamma(o) + \frac{b^2}{d^2}[\Gamma(d) - \Gamma(o)] \qquad b<d$$

$$d = \text{Lennard-Jones } \sigma \tag{3-16}$$

To obtain the relation for $\Gamma(o)$, we recalculate (3-9) for head-on collisions only. A similar result is obtained, with (3-12) replaced by

$$G_o(x) = J_3^2(x) \cong e^{-x/2}\,(.1100 + .0392x - .0295x^2 + .0064x^3 - .0006x^2) \tag{3-17}$$

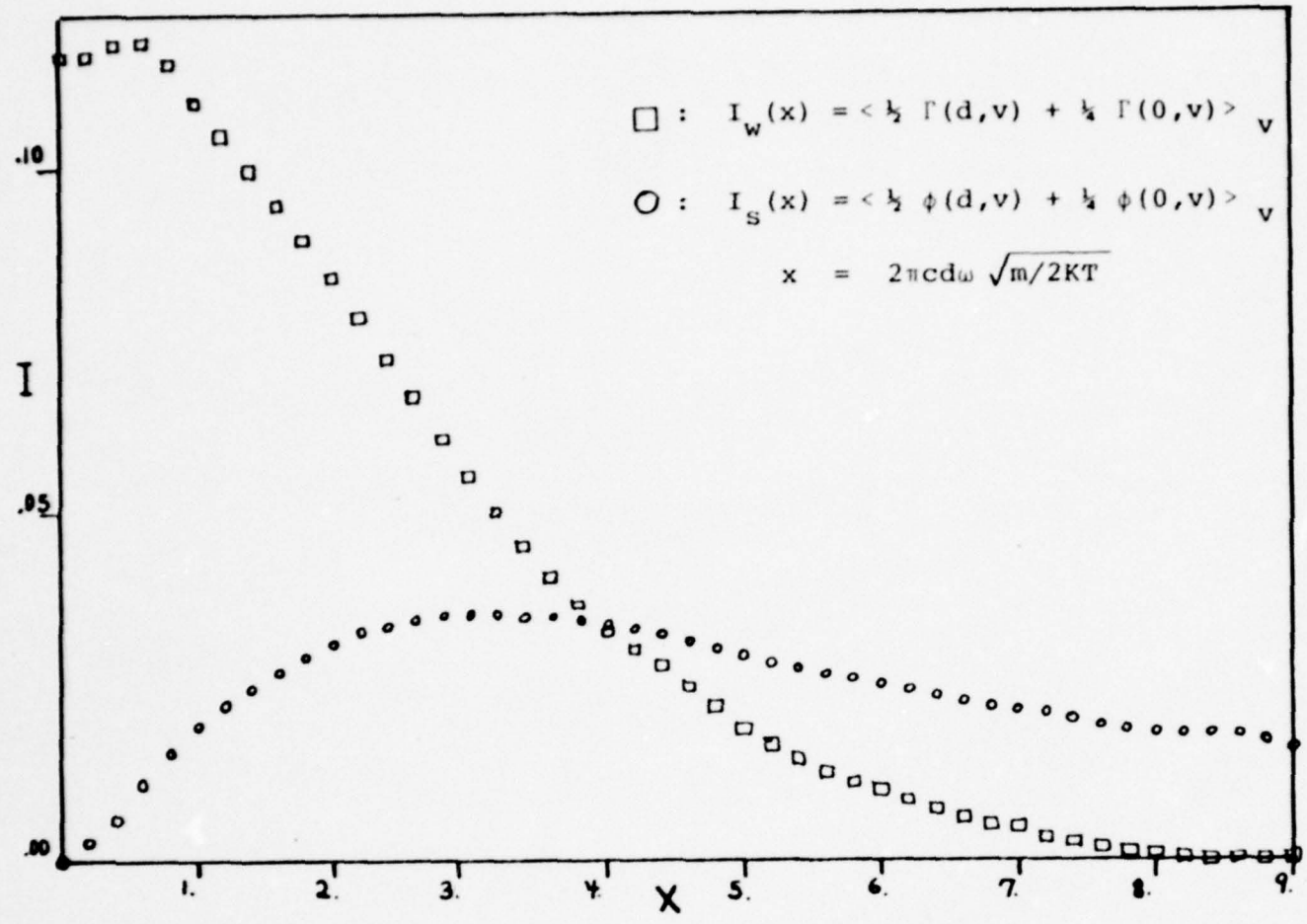

FIGURE 2

Dipole-Quadrupole Response Functions
for
Widths and Shifts of Levels

The Hilbert transform can be evaluated as before. Averaging (3-16) over b, we obtain

$$\int_0^\infty r(b)\ b\,db = \frac{1}{4}\, r(o,v) + \frac{1}{2}\, r(d,v) \qquad (3\text{-}17)$$

The averaging integral over v was done numerically, leaving a line broadening response function and a line shift response function depending only on energy defect w. Finally, the averaging over the N_2 initial state was done assuming a Boltzman distribution:

$$P(J_1) = (2J_1+1)\ e^{-BJ_1(J_1+1)} \Big/ \sum_J (2J+1)\ e^{-BJ(J+1)} \qquad (3\text{-}18)$$

For H_2O, we used the dipole moment operator given by 3.6. The quadrupole moments and rotational constants for N_2 and O_2 are given below.

N_2 and O_2 Molecular Parameters:

	Q ($\times 10^{-54}$ esu)	B (cm^{-1})
N_2	1.7	2.01
O_2	1.0	1.45

In Tables 8 and 9 we give the resulting level half widths and shifts due to N_2 and O_2 at $T=300_o$. Note that to obtain the line half width, the two level half widths are added. Conversely, to obtain the line shift, we subtract the lower level line shift from the upper level line shift. Consequently, the shifts are generally an order of magnitude less than the widths. In fact, the shifts are so small for atmospheric pressures ($\sim .01$ cm^{-1}), that they are less than the accuracy of our model. In Table 10 we compare the half widths with other theories and experiments. The results are in general very good, with differences attributable mainly to the approximate impact parameter averaging process used. To see this, we need only note that the widths depend sensitively on the cutoff impact parameter as d^{-4}. A numerical impact parameter averaging may be used with the exponential form of the probability, but this leads to a factor of ten increase in computation time. If additional accuracy is needed, this modification can easily be done, and the resulting calculation will consume approximately 1 minute of CDC 7600 time.

TABLE 8. CALCULATED WIDTHS AND SHIFTS OF H_2O ROTATIONAL LEVELS DUE TO COLLISIONS WITH N_2, IN MH_Z/T

Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T		Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T
0_{00}	.25	.20		5_{24}	1.39	1.35
1_{01}	.81	.55		5_{23}	2.14	1.66
1_{11}	.69	.51		5_{33}	1.10	1.15
1_{10}	.77	.51		5_{32}	1.41	1.27
2_{02}	1.27	.91		5_{42}	.58	.87
2_{12}	1.06	.81		5_{41}	.61	.88
2_{11}	1.20	.88		5_{51}	.18	.61
2_{21}	.78	.68		5_{50}	.18	.61
2_{20}	.81	.70		6_{06}	1.43	1.57
3_{03}	1.55	1.18		6_{16}	1.39	1.55
3_{13}	1.43	1.06		6_{15}	1.80	1.70
3_{12}	1.56	1.23		6_{25}	1.28	1.48
3_{22}	1.07	.93		6_{24}	2.47	1.89
3_{21}	1.20	1.02		6_{34}	1.25	1.35
3_{31}	.54	.71		6_{33}	2.00	1.62
3_{30}	.55	.71		6_{43}	.86	1.09
4_{04}	1.73	1.34		6_{42}	.99	1.13
4_{14}	1.64	1.28		6_{52}	.36	.81
4_{13}	1.86	1.49		6_{51}	.37	.81
4_{23}	1.32	1.15		6_{61}	.11	.58
4_{22}	1.68	1.36		6_{60}	.11	.58
4_{32}	.82	.93		7_{07}	1.07	1.61
4_{31}	.91	.96		7_{17}	1.05	1.60
4_{41}	.31	.66		7_{16}	1.42	1.68
4_{40}	.31	.66		7_{26}	1.06	1.54
5_{05}	1.69	1.48		7_{25}	2.52	2.04
5_{15}	1.61	1.44		7_{35}	1.28	1.50
5_{14}	1.98	1.64		7_{34}	2.58	1.97

TABLE 8. (concluded)

Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T		Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T
7_{44}	1.06	1.31		8_{71}	.13	.71
7_{43}	1.44	1.43		8_{8i}	.04	.54
7_{53}	.57	1.02		8_{80}	.04	.54
7_{52}	.60	1.03		9_{09}	.43	1.55
7_{62}	.22	.76		9_{19}	.43	1.55
7_{61}	.22	.76		9_{18}	.60	1.56
7_{71}	.06	.56		9_{28}	.51	1.51
7_{70}	.06	.56		9_{27}	1.78	1.98
8_{08}	.72	1.60		9_{37}	.97	1.62
8_{18}	.71	1.60		9_{36}	3.08	2.41
8_{17}	.99	1.63		9_{46}	1.17	1.63
8_{27}	.77	1.55		9_{45}	2.58	2.13
8_{26}	2.26	2.07		9_{55}	.86	1.42
8_{36}	1.17	1.59		9_{54}	1.18	1.52
8_{35}	2.97	2.24		9_{64}	.47	1.12
8_{45}	1.16	1.50		9_{63}	.49	1.13
8_{44}	2.01	1.76		9_{73}	.22	.87
8_{54}	.74	1.23		9_{72}	.22	.87
8_{53}	.86	1.27		9_{82}	.08	.67
8_{63}	.35	.94		9_{81}	.08	.67
8_{62}	.35	.94		9_{91}	.03	.53
8_{72}	.13	.71		9_{90}	.03	.53

TABLE 9. CALCULATED WIDTHS AND SHIFTS OF ROTATIONAL LEVELS OF H_2O DUE TO COLLISIONS WITH O_2, IN MH_Z/T

Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T		Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T
0_{00}	0.19	.13		5_{24}	.77	.88
1_{01}	.60	.38		5_{23}	1.55	1.10
1_{11}	.49	.35		5_{33}	.63	.74
1_{10}	.53	.35		5_{32}	.94	.83
2_{02}	.93	.62		5_{42}	.31	.55
2_{12}	.76	.54		5_{41}	.33	.56
2_{11}	.85	.59		5_{51}	.08	.38
2_{21}	.48	.44		5_{50}	.08	.38
2_{20}	.51	.46		6_{06}	.69	1.01
3_{03}	1.09	.79		6_{16}	.65	1.00
3_{13}	.96	.71		6_{15}	1.10	1.11
3_{12}	1.13	.82		6_{25}	.66	.95
3_{22}	.67	.61		6_{24}	1.74	1.25
3_{21}	.82	.67		6_{34}	.69	.88
3_{31}	.29	.44		6_{33}	1.36	1.07
3_{30}	.30	.44		6_{43}	.45	.70
4_{04}	1.11	.90		6_{42}	.56	.73
4_{14}	1.00	.86		6_{52}	.17	.51
4_{13}	1.32	.99		6_{51}	.18	.51
4_{23}	.79	.76		6_{61}	.05	.36
4_{22}	1.20	.90		6_{60}	.05	.36
4_{32}	.48	.59		7_{07}	.43	1.01
4_{31}	.57	.62		7_{17}	.41	1.00
4_{41}	.16	.41		7_{16}	.77	1.08
4_{40}	.16	.41		7_{26}	.49	.97
5_{05}	.95	.98		7_{25}	1.69	1.35
5_{15}	.88	.95		7_{35}	.67	.96
5_{14}	1.33	1.08		7_{34}	1.75	1.31

TABLE 9. (concluded)

Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T		Rotational Level $J_{K_1K_2}$	Width MHz/T	Shift MHz/T
7_{44}	.54	.85		8_{71}	.06	.44
7_{43}	.85	.93		8_{81}	.02	.34
7_{53}	.27	.65		8_{80}	.02	.34
7_{52}	.27	.65		9_{09}	.12	.93
7_{62}	.10	.47		9_{19}	.12	.93
7_{61}	.10	.47		9_{18}	.23	.96
7_{71}	.03	.35		9_{28}	.19	.93
8_{08}	.24	.98		9_{27}	1.03	1.29
8_{18}	.23	.97		9_{37}	.44	1.02
8_{17}	.46	1.02		9_{36}	1.96	1.60
8_{27}	.32	.96		9_{46}	1.57	1.40
8_{26}	1.42	1.36		9_{55}	.38	.90
8_{36}	.58	1.01		9_{54}	.58	.97
8_{35}	1.97	1.49		9_{64}	.21	.70
8_{45}	.57	.96		9_{63}	.22	.71
8_{44}	1.21	1.16		9_{73}	.11	.54
8_{54}	.34	.78		9_{72}	.11	.54
8_{53}	.42	.81		9_{82}	.04	.42
8_{63}	.16	.59		9_{81}	.04	.42
8_{62}	.16	.59		9_{91}	.02	.33
8_{72}	.06	.44		9_{90}	.02	.33

TABLE 10. COLLISION BROADENED LINE WIDTHS

H_2O BROADENED BY O_2 AND N_2, COMPARISON WITH OTHER THEORIES AND EXPERIMENT

Line	O_2 Broadened (MHz/T)			N_2 Broadened (MHz/T)		
	Theory[20]	Present	Experiment	Theory[20]	Present	Experiment
1_{01}-1_{10}	2.87	1.14		4.14	1.58	
2_{02}-2_{11}	2.65	1.78		4.09	2.47	
2_{20}-3_{13}	2.66	1.47	2.7	4.10	2.24	3.8
3_{21}-4_{14}	2.69	1.82		4.16	2.84	
3_{30}-4_{23}	2.69	1.09		4.14	1.87	
4_{22}-5_{15}	2.73	2.08		4.20	3.29	
4_{40}-5_{33}	2.74	.79		4.23	1.41	
4_{41}-5_{32}	2.63	1.10		4.05	1.71	
5_{23}-6_{16}	2.74	2.20	2.5	4.23	3.52	4.1
5_{50} 6_{43}	2.69	.54		4.14	1.03	
5_{51}-6_{42}	2.70	.65		4.16	1.16	

IIID. Band Model

The line-by-line band model is based on a list of line frequencies, strengths, and widths. First, a table of collisional widths and shifts for the specific temperature and composition is formed. Then, all the possible VR transitions are determined, the intensities of each line calculated, the

widths determined by adding the widths of the upper and lower level, and the shifts by subtracting the two level shifts.

In Appendix 1 we give a list of the water vapor lines and strengths for the HF and DF regions of the spectrum 2800 to 4800 cm^{-1}. The half widths and line shifts for each line for a specific concentration of N_2 and O_2 can be determined from tables 7 and 9. Since these tables are determined for the ground state, the calculation should be repeated for each band, since the asymmetry varies with the degree of vibrational excitation. However, to a first order of approximation the results for the ground state can be used for any band.

The calculation of the widths and shifts for each band can easily be adopted into the program which calculates the lines and strengths to give all the parameters of a band model for each temperature, pressure, and composition. The exact form of such a band modeling program obviously would depend on its purpose.

C. Description of Computer Codes

I. Introduction

The present codes consist of a set of 12 modules whose interrelations are indicated in Figures 3 and 4 for rate calculations and band modeling. In

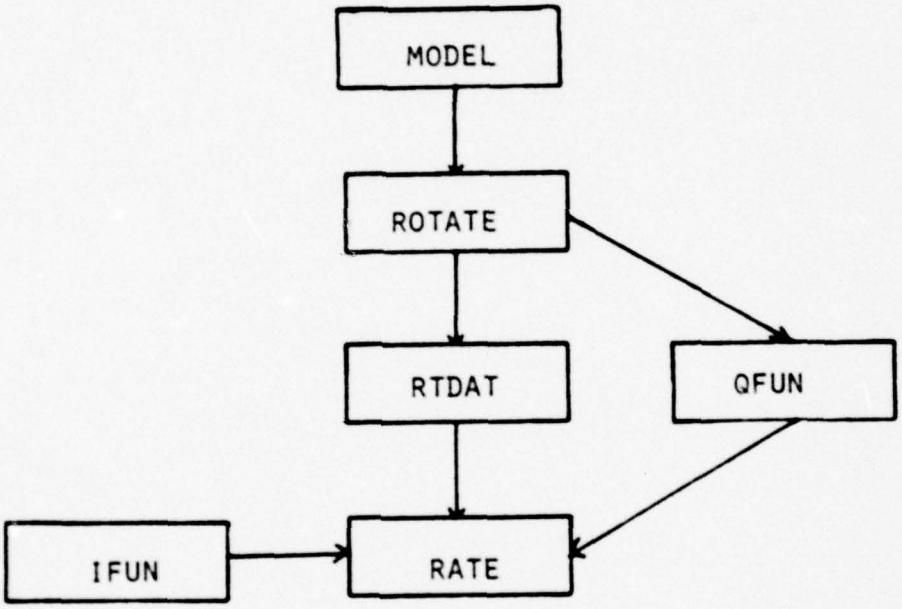

Figure 3

Code structure for rate calculations

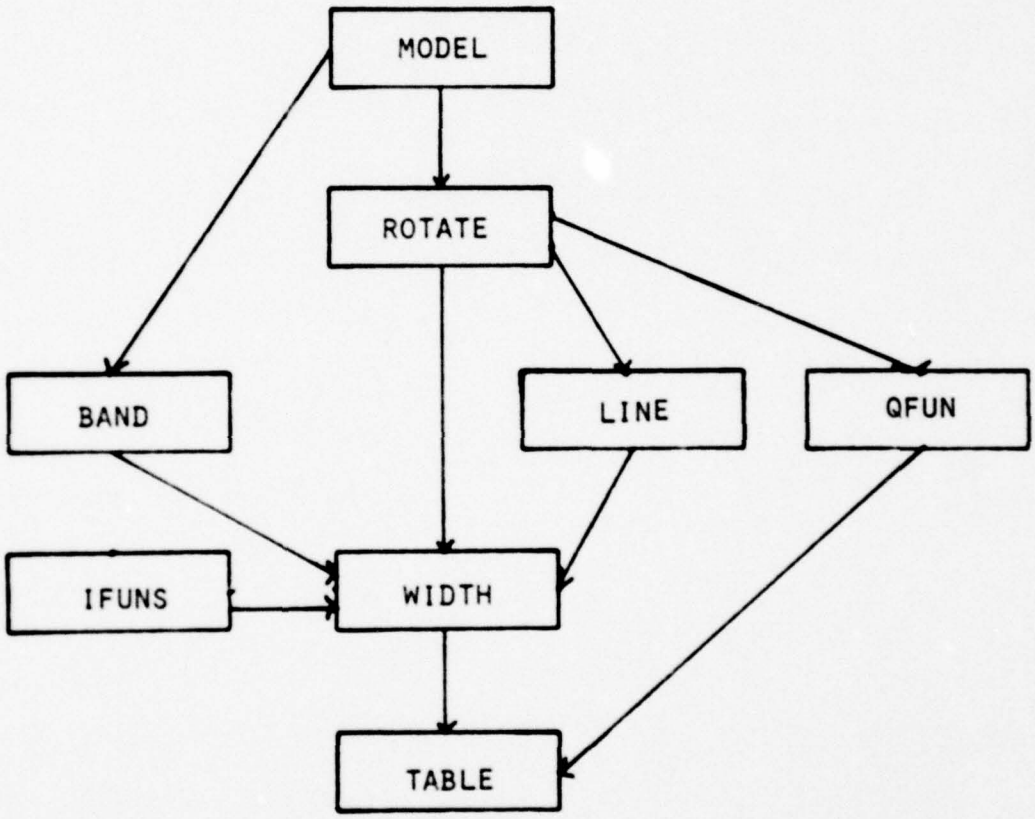

Figure 4

Code structure for band modeling

general, data is transferred from module to module by storing it on disc. A brief description of each module follows:

II. Description of Codes

(a) Model

This program has been documented elsewhere. [12] Its purpose is to calculate the non-diagonal rotation matrices A, B, and C. It does so by varying the vibrational potentials to fit observed band origons. Output quantities are the band origins and the rotation matrices. If needed, the Morse oscillator matrix elements, the vibrational wave functions, and the rotation matrices are stored on disc for later use. The vibrational wave functions are the coefficients of an expansion in a set of Morse oscillator functions.

(b) STAND

STAND consists of two utility programs, HDIAG and STEPIT. HDIAG diagonalizes symmetric matrices and calculates the necessary transformation matrices. STEPIT is the fitting routine. The parameters to be varied are stored in the array Z(I), and the sum of the squares of differences to be minimized is calculated by the main program routine SMSQER. MODEL, BAND, and LINE must be loaded with the utility programs in STAND.

(c) ROTATE

This program calculates the roto-vibrational energy levels using the rotational matrices stored on disc by MODEL. If needed, the energy level as well as the roto-vibrational wave functions in the form of coefficients of an expansion in vibrational wave functions and symmetric top wave functions are stored on disc. These coefficients take up large amounts of storage space, but storage is convenient since this data is used by three other programs for different purposes.

The wave functions resulting from MODEL are used in WANG where the matrix elements of the rotational piece of the Hamiltonian in the basis of Wang states are calculated. The resulting matrix is diagonalized to yield the roto-vibrational energies and transformation matrices. The C_{2v} symmetry is taken fully into account. The roto-vibrational wave functions are then represented by the columns of the transformation matrices U, and are just the coefficients of an expansion in a basis space consisting of a product of vibrational wave functions and Wang symmetric top wave functions.

(c) IFN

This program calculates the fourier transform response function of any multipole-multipole electromagnetic interaction in the classical path approximation. As is well known, the result is given in terms of a sum of products of Kelvin functions. In addition, the response function for a head

on collision, with impact parameter $b = 0$, is calculated. The results can be used for V, VR, or RR rates.

(e) QFN

This routine takes the ordered energy levels placed on disc by ROTATE and evaluates the statistical Q function given below as a function of temperature:

$$Q = \sum_{J,\tau} g_{j,\tau}(2J+1)e^{-E_{j\tau}/KT} \qquad (2\text{-}1)$$

(f) RTDAT

This program evaluates the matrix elements of an arbitrary potential $V(R,\theta,\phi)$ between VR states whose energy difference lies in a particular spectral region and places the results on disc. The potential is expressed as a series of spherical harmonics, and the result is found using the known matrix elements of speherical harmonics between symmetric top wave functions. The full roto-vibrational wave functions found by MODEL and ROTATE are used.

(g) RATE

RATE calculates transition probabilities induced by an arbitrary potential V by combining the matrix elements of V found by RTDAT with an appropriate response function. The result is given as a function of temperature.

(h) BAND

To determine the dipole matrix element given by (3.1), this program varies the μ_{ijk} in order to fit experimental integrated band intensities. The vibrational wave functions resulting from MODEL are used, and the fitting routine is STEPIT.

(i) LINE

LINE, TABLE, and WIDTH all use the roto-vibrational wave functions found by ROTATE to calculate dipole moment matrix elements. The dipole moment operator is given by the relation

$$\mu = \sum_{i,j,k} \mu_{ijk} \cdot q_1^i \, q_2^j \, q_3^k \qquad (2\text{-}2)$$

where μ_{ijk} have the usual dependence on rotational coordinates and q_1 are vibrational coordinates. LINE calculates the dipole transition strength for up to 500 H_2O absorbtion lines, which are given as input. An option is to use the fitting routine STEPIT to vary the parameters μ_{ijk} in order to acheive a fitting of experimental line strengths.

(j) WIDTH

This program uses the Anderson theory of collision broadening to calculate the widths and shifts of H_2O levels caused by collisions with homonuclear molecules such as N_2 and O_2. The dipole quadrupole moment long ranged

interaction is presumed to dominate the process. The probabilities of virtual transitions to all possible neighboring levels are calculated and summed up to yield both the level width and shift. Each individual probability is assumed to be small enough so that the non-exponential, single quantum exchange form of the transition probability can be used. In this case, an approximate average over the impact parameter b can be used, which eliminates the need for a numerical integration. This approximate averaging was also used in our collisional rate calculations and gives only 20-40% accuracy, but saves quite a bit of computer time. If accuracy is needed, the exponential, multi-quantum exchange form of the transition probabilities together with numerical integration over impact probabilities should be used. The line widths and shifts in units of cm^{-1}/atm^{-1} are given for each level. Those for the highest J states included are wrong, because the virtual transitions to J+1 were not included.

(k) IFUNS

In this specialized program the velocity and impact parameter response functions for line shifts and line widths are calculated. The fourier transform of the interaction potential is fit to the form

$$G(x) = e^{-2x} \sum_{i=0} C_i x^i \qquad (2\text{-}3)$$

where $x = wb/v$ (2-4)

and $$G(x) = \left| \frac{i}{\hbar} \int_{-\infty}^{\infty} e^{-iwt} V_{ij}(t)dt \right|^2 \qquad (2\text{-}5)$$

Then the line shift response function is given in terms of exponential integrals. In addition, the head on response function is determined. Both are averaged over velocity, and the approximate impact parameter averaging described in part B is performed. The results are used in WIDTH, where the response functions are determined by interpolating between values calculated by IFUNS.

(1) TABLE

TABLE uses the energy levels from ROTATE to create a spectrum of all possible absorbtion lines. The dipole strengths are calculated assuming a dipole operator given by 3.1, and the results are given in the form of a table, ordered by line frequency. Both the temperature dependent line strength and the dipole matrix element is printed.

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APPENDIX 1

Table of H_2O Absorption Lines from 2800 cm^{-1} to 4800 cm^{-1}

Explanation of Table:

Column:

1. Lower state vibrational quantum numbers (v_1 v_2 v_3)
2. Upper state vibrational quantum numbers (v_1 v_2 v_3)
3. J of lower state
4. τ of lower state
5. J of upper state
6. τ of upper state
7. Frequency of line in cm^{-1}
8. Energy of lower level in cm^{-1}
9. Line strength in $cm^{-1}/gm\ cm^{-2}$
10. Transition dipole moment in $(debye)^2 \times 10^4 \times (2J+1)$

T = 300°K
Bands included = (000), (010), (100), (110), (020), (120), (001), with $J \leq 10$
Centrifugal distortion included for all but the (001) band.
Coriolis Interaction neglected.

Dipole moment operator:

$$\mu = 1.8519 + .4580\ q_1 - .7811\ q_2 - .4974\ q_1 q_2$$

$$- .7890\ q_1 q_2^2 + .0143\ q_2^2 + 1.4572\ q_3$$

The line strength at any temperature can be obtained from Column 10 using the following relation:

$$S = (1-e^{-\frac{hc\nu}{KT}}) \frac{8\pi^3 A\nu}{3Mhc} (\mu x 10^{-40}) \frac{ge^{-\frac{hcE}{KT}}}{Q(T)}$$

ν = line frequency in cm^{-1}

h,c,k = in c.g.s. units

A = Avogadro's number

M = Molecular weight of H_2O in gm

μ = Column 10

g = statistical factor = $2-(-1)^{\tau}$, τ of lower state

Q(T) = statistical Q function = $\Sigma g(2j+1)e^{-hcE/KT}$

E = Energy of lower state in cm^{-1} (column 8)

(000)	(100)	7	7	6	-3	2800.47	1400.82	.122929E-04	.152795E-03
(000)	(001)	9	7	9	-6	2801.12	2022.04	.520724E-06	.127220E-03
(000)	(010)	10	-1	10	9	2804.03	1724.02	.372746E-06	.217936E-04
(000)	(010)	9	-5	9	9	2805.34	1202.07	.566495E-06	.271037E-05
(000)	(001)	9	5	8	-6	2807.71	1820.70	.209726E-04	.194680E-02
(000)	(100)	9	4	8	-4	2807.94	1820.70	.510633E-04	.142188E-01
(010)	(001)	8	-7	7	6	2808.03	2337.94	.141621E-06	.156971E-03
(000)	(020)	10	1	10	-5	2808.76	1883.60	.559679E-03	.702141E-01
(000)	(020)	9	4	9	-2	2809.46	1820.70	.152134E-03	.423395E-01
(000)	(020)	6	1	5	-3	2809.91	758.34	.169052E-01	.961937E-02
(000)	(020)	8	5	8	-1	2810.16	1598.74	.498541E-03	.159512E-01
(000)	(020)	7	0	7	-6	2810.42	929.72	.540456E-03	.209798E-02
(000)	(020)	8	1	9	-9	2810.67	1259.29	.145733E-03	.915628E-03
(000)	(020)	10	3	10	-3	2810.98	2066.48	.279482E-03	.842008E-01
(000)	(020)	4	4	3	-2	2811.02	488.96	.915913E-12	.429523E-12
(010)	(001)	7	-6	8	1	2811.24	2181.31	.249004E-06	.390271E-03
(000)	(100)	10	3	10	-3	2811.65	2269.59	.214050E-04	.170734E-01
(010)	(020)	7	-4	7	6	2811.98	2319.03	.215614E-06	.653887E-03
(000)	(001)	10	3	9	-2	2812.65	2269.59	.271609E-04	.216568E-01
(010)	(001)	8	-8	8	3	2812.70	2337.73	.883422E-07	.292970E-03
(000)	(020)	7	6	7	0	2813.07	1400.82	.973452E-04	.361360E-02
(000)	(020)	7	7	7	1	2814.91	1400.82	.288128E-03	.356292E-02
(000)	(020)	9	2	9	-4	2815.07	1638.69	.399292E-03	.463378E-01
(000)	(020)	8	6	8	0	2816.08	1598.74	.162619E-03	.155765E-01
(000)	(100)	8	4	7	-6	2816.30	1417.81	.356322E-04	.143334E-02
(010)	(100)	7	-7	7	7	2817.33	2180.84	.312173E-07	.162372E-04
(000)	(020)	8	1	8	-5	2817.90	1259.29	.232914E-02	.145962E-01
(000)	(010)	10	-6	10	8	2818.01	1438.35	.679878E-06	.301609E-04
(000)	(020)	8	3	8	-3	2819.35	1417.79	.184986E-02	.247748E-01
(000)	(020)	7	-3	6	-5	2819.79	782.45	.310519E+00	.197649E+00
(000)	(020)	9	6	9	0	2820.67	2022.04	.172309E-04	.125417E-01
(000)	(020)	7	4	7	-2	2822.53	1221.05	.637326E-03	.995829E-02
(000)	(020)	10	5	10	-1	2822.57	2269.59	.380519E-04	.302341E-01
(000)	(100)	9	9	8	3	2823.28	2238.53	.789839E-04	.540596E-01
(000)	(100)	9	8	8	4	2823.31	2238.53	.263299E-04	.540630E-01
(010)	(100)	6	-5	7	5	2823.93	2042.91	.613156E-06	.164231E-03
(000)	(020)	9	7	9	1	2824.10	2022.04	.642083E-04	.155594E-01
(000)	(020)	9	5	9	-1	2824.18	1820.70	.426784E-03	.393855E-01
(000)	(020)	6	5	6	-1	2825.33	1048.63	.104775E-02	.238500E-02
(000)	(020)	8	5	9	-5	2826.52	1598.74	.708416E-06	.225351E-04
(000)	(020)	10	6	10	0	2827.34	2269.59	.186138E-04	.442939E-01
(000)	(020)	5	2	4	-2	2828.54	611.33	.192744E-02	.161522E-02
(000)	(020)	8	7	8	1	2829.13	1798.24	.367310E-04	.303830E-02
(000)	(020)	6	-1	5	-5	2830.07	649.73	.229965E+00	.771822E-01
(000)	(020)	8	8	8	2	2830.47	1798.24	.133136E-04	.330224E-02
(000)	(100)	8	5	7	-3	2831.00	1598.74	.931680E-04	.295903E-02
(000)	(010)	7	-5	8	7	2831.13	704.23	.161291E-04	.702734E-05
(010)	(001)	7	-4	8	3	2831.40	2319.03	.178298E-06	.537010E-03
(000)	(001)	8	8	8	-5	2831.75	1798.24	.301393E-02	.747224E+00
(000)	(020)	7	2	8	-8	2832.91	1063.04	.595733E-04	.434759E-03
(000)	(100)	7	7	7	-7	2833.17	1400.82	.272947E-05	.335343E-04
(000)	(001)	9	7	10	-10	2834.33	2022.04	.203031E-02	.490221E+00
(000)	(020)	7	2	7	-4	2834.86	1063.04	.109692E-02	.799967E-02
(000)	(020)	6	6	6	0	2834.94	1048.63	.331626E-03	.225698E-02
(000)	(020)	10	-2	9	-4	2835.63	1618.13	.188743E-01	.197034E+01
(010)	(001)	7	-5	7	6	2836.08	2309.89	.248362E-06	.238260E-03
(010)	(100)	6	-3	7	7	2836.52	2161.67	.484214E-06	.228187E-03

(000)	(020)	6	5	7	-5	2837.64	1048.63	.114598E-04	.259730E-04
(000)	(001)	10	6	9	-1	2838.12	2269.59	.199159E-03	.472125E+00
(000)	(100)	10	1	9	-7	2838.76	1883.60	.864620E-03	.107324E+00
(000)	(010)	9	-8	9	6	2839.17	920.16	.836859E-06	.307161E-05
(000)	(100)	10	-1	9	-9	2839.97	1724.02	.733943E-03	.423689E-01
(000)	(100)	9	6	9	-4	2840.37	2022.04	.519564E-05	.375548E-02
(000)	(001)	9	6	8	-1	2841.08	2022.04	.649637E-05	.469464E-02
(000)	(020)	10	4	10	-2	2842.51	2066.51	.786652E-04	.703209E-01
(000)	(100)	9	8	10	-6	2842.71	2238.53	.164394E-09	.335245E-06
(000)	(001)	9	5	9	-8	2843.28	1820.70	.248031E-01	.227357E+01
(000)	(020)	6	1	6	-5	2843.90	758.34	.149538E-02	.840840E-03
(000)	(020)	7	5	7	-1	2844.63	1221.06	.168245E-02	.869518E-02
(000)	(020)	8	-2	8	-8	2845.31	1050.64	.149954E-03	.102669E-02
(000)	(020)	4	3	3	-1	2846.16	488.94	.788659E-03	.121748E-03
(000)	(020)	8	-2	7	-4	2847.26	1050.64	.131587E+00	.900317E+00
(000)	(020)	6	3	6	-3	2847.43	891.23	.317400E-02	.337050E-02
(000)	(020)	6	3	7	-7	2848.44	891.23	.143154E-03	.151962E-03
(000)	(100)	10	6	9	0	2849.56	2269.59	.169527E-03	.400265E+00
(000)	(020)	7	4	8	-6	2850.52	1221.05	.119576E-04	.185004E-03
(000)	(100)	7	6	6	-2	2850.91	1400.82	.920189E-05	.337054E-03
(000)	(001)	9	3	8	-8	2850.99	1638.83	.242848E-01	.928203E+00
(000)	(100)	10	5	9	1	2852.10	2269.59	.510925E-03	.401752E+00
(000)	(001)	9	7	8	0	2853.11	2022.04	.116248E-02	.278834E+00
(000)	(001)	8	6	7	-5	2853.20	1598.74	.416437E-05	.393696E-03
(000)	(020)	9	2	10	-8	2853.41	1638.69	.136839E-04	.156668E-02
(000)	(100)	8	7	8	-3	2853.72	1798.24	.469103E-05	.384687E-03
(010)	(100)	8	-8	8	6	2855.20	2337.73	.315949E-07	.103219E-03
(000)	(020)	8	3	9	-7	2855.61	1417.79	.492620E-04	.651380E-03
(000)	(020)	5	4	5	-2	2856.38	743.95	.541314E-03	.848413E-03
(000)	(020)	9	4	10	-6	2856.50	1820.70	.526824E-06	.144203E-03
(000)	(020)	5	4	6	-6	2857.06	743.95	.186156E-04	.291697E-04
(000)	(010)	9	-9	10	3	2860.51	920.12	.222217E-03	.269795E-03
(000)	(020)	8	4	8	-2	2861.73	1417.81	.471307E-03	.186578E-01
(010)	(001)	6	0	7	7	2862.37	2283.60	.977657E-07	.245766E-03
(000)	(001)	8	8	9	-9	2865.73	1798.24	.147553E-01	.361480E+01
(010)	(001)	5	-5	6	6	2866.70	1920.83	.293342E-06	.431040E-04
(000)	(100)	10	3	10	-7	2869.49	2066.48	.177251E-04	.523124E-02
(000)	(001)	8	7	7	0	2869.65	1798.24	.647822E-05	.528296E-03
(000)	(020)	3	0	4	-4	2871.31	504.58	.104408E+00	.516625E-01
(000)	(020)	5	2	5	-4	2871.32	611.33	.307243E-03	.253637E-03
(000)	(100)	10	1	10	-9	2873.20	1883.60	.193027E-04	.236730E-02
(010)	(001)	6	-1	7	6	2873.23	2272.74	.466484E-05	.369651E-02
(000)	(010)	8	0	9	8	2873.57	1133.84	.736054E-05	.743615E-04
(010)	(100)	7	-4	8	6	2873.90	2319.03	.495245E-06	.146956E-02
(000)	(020)	10	-2	10	-8	2873.97	1618.13	.128595E-03	.132453E-01
(000)	(001)	8	8	7	1	2874.25	1798.24	.351424E-02	.858380E+00
(000)	(020)	9	-1	8	-3	2874.93	1362.21	.270262E+00	.271921E+01
(010)	(001)	8	-7	9	0	2875.24	2337.94	.346654E-06	.375246E-03
(000)	(100)	7	5	6	-5	2875.74	1221.06	.120577E-03	.616418E-03
(000)	(010)	8	-6	9	6	2876.35	882.98	.203764E-04	.617688E-04
(000)	(100)	9	7	8	1	2877.07	2022.04	.730835E-03	.173840E+00
(000)	(100)	9	6	8	2	2877.89	2022.04	.243931E-03	.174018E+00
(000)	(020)	6	-2	5	-4	2879.79	602.86	.390489E+00	.308619E+00
(010)	(100)	7	-6	8	4	2880.53	2181.31	.237887E-06	.363878E-03
(000)	(010)	8	-1	9	9	2882.43	1124.98	.230096E-04	.740355E-04
(000)	(020)	9	8	9	2	2882.52	2238.53	.629882E-06	.126677E-02
(000)	(020)	9	9	9	3	2882.64	2238.53	.189738E-05	.127189E-02
(000)	(020)	9	3	9	-3	2883.62	1638.83	.694888E-03	.262410E-01
(000)	(020)	5	5	5	-1	2886.32	743.96	.124826E-02	.645362E-03
(000)	(100)	9	2	8	-6	2889.19	1638.69	.637385E-03	.720709E-01
(000)	(001)	8	6	8	-7	2891.13	1598.74	.239599E-06	.223543E-04
(000)	(001)	7	7	6	-4	2891.96	1400.82	.279415E-05	.336312E-04
(000)	(020)	4	3	4	-3	2892.79	488.94	.299279E-03	.454561E-04
(000)	(001)	10	3	9	-4	2892.81	2066.48	.246992E-02	.723074E+00
(000)	(010)	10	-10	9	8	2892.95	1114.46	.173877E-07	.159003E-06
(000)	(010)	10	-9	10	5	2893.65	1114.48	.449545E-05	.137010E-04

(000)	(010)	9	-1	10	7	2894.15	1362.21	.531236E-04	.530947E-03
(000)	(020)	7	-1	6	-3	2895.69	842.97	.164313E+01	.136134E+01
(000)	(020)	7	-1	7	-7	2896.70	842.97	.726365E-02	.601586E-02
(000)	(100)	8	8	8	-2	2898.20	1798.24	.647137E-06	.156762E-03
(000)	(020)	9	-1	10	-9	2899.52	1362.21	.414230E-03	.413238E-02
(000)	(020)	6	4	6	-2	2899.98	891.26	.608670E-03	.190419E-02
(000)	(020)	10	0	9	-2	2900.45	1729.71	.327130E-01	.570065E+01
(000)	(100)	9	4	9	-6	2903.12	1820.70	.693182E-05	.186691E-02
(000)	(100)	8	8	7	2	2905.49	1798.24	.207216E-03	.500697E-01
(000)	(100)	8	7	7	3	2905.70	1798.24	.621807E-03	.500791E-01
(000)	(020)	4	1	3	-3	2906.60	382.96	.242377E+00	.220420E-01
(000)	(100)	9	7	9	-3	2906.72	2022.04	.496999E-05	.117013E-02
(000)	(020)	8	0	7	-2	2909.74	1133.84	.349120E+00	.348322E+01
(000)	(100)	9	0	8	-8	2909.92	1479.75	.177796E-02	.931550E-01
(000)	(020)	9	-1	9	-7	2911.19	1362.21	.248025E-02	.246439E-01
(000)	(100)	9	6	10	-8	2912.93	2022.04	.107704E-08	.759110E-06
(000)	(010)	9	-2	10	8	2912.96	1343.40	.195217E-04	.531398E-03
(000)	(020)	10	2	10	-4	2914.15	1884.06	.557389E-04	.202640E-01
(000)	(100)	10	6	10	-4	2914.42	2269.59	.238858E-05	.551409E-02
(010)	(001)	6	-6	7	5	2914.60	2041.91	.208557E-06	.161594E-03
(000)	(001)	10	5	10	-6	2914.80	2269.59	.134383E-02	.103395E+01
(000)	(020)	7	3	7	-3	2915.75	1063.23	.957407E-03	.226491E-02
(000)	(001)	8	4	7	-7	2916.11	1417.81	.397687E-01	.154498E+01
(000)	(100)	10	4	9	-2	2917.46	2066.51	.103734E-02	.903487E+00
(010)	(020)	6	-2	7	6	2919.50	2211.51	.574473E-06	.100209E-02
(000)	(020)	10	-1	9	-1	2920.86	1724.02	.117318E+00	.658493E+01
(010)	(020)	7	-3	8	5	2922.49	2393.01	.476776E-05	.661196E-02
(000)	(100)	8	7	9	-7	2924.12	1798.24	.775913E-09	.620968E-07
(000)	(100)	9	2	9	-8	2925.39	1638.69	.129397E-04	.144502E-02
(000)	(010)	9	-6	9	8	2926.76	1080.65	.515006E-07	.395845E-06
(000)	(020)	9	1	8	-1	2926.93	1481.97	.353933E+00	.621120E+01
(000)	(001)	9	6	9	-5	2928.00	2022.04	.636324E-06	.446319E-03
(000)	(001)	9	4	8	-3	2928.82	1820.70	.298150E-02	.795946E+00
(000)	(010)	9	-7	10	5	2928.90	1079.23	.107325E-03	.272910E-03
(000)	(100)	6	6	5	-4	2929.36	1048.63	.217321E-04	.143137E-03
(000)	(020)	8	2	8	-4	2931.36	1260.01	.191232E-04	.346802E-03
(000)	(100)	8	5	8	-5	2931.80	1598.74	.183703E-04	.563385E-03
(000)	(001)	7	7	7	-6	2933.23	1400.82	.528628E+00	.627319E+01
(000)	(100)	8	3	7	-5	2933.37	1417.79	.277977E-02	.357819E-01
(000)	(001)	8	7	8	-4	2934.27	1798.24	.264712E-01	.211118E+01
(000)	(020)	9	0	8	0	2935.07	1479.75	.125944E+00	.654221E+01
(000)	(020)	5	-1	4	-3	2935.09	446.64	.403962E+01	.496150E+00
(000)	(100)	9	4	10	-10	2936.04	1820.70	.949341E-10	.252815E-07
(000)	(020)	9	-2	8	-2	2936.14	1343.40	.179933E+00	.485929E+01
(000)	(020)	8	0	9	-8	2936.17	1133.84	.285452E-03	.282235E-02
(000)	(020)	3	2	2	-2	2936.56	285.50	.271186E-01	.458933E-02
(000)	(020)	8	0	8	-6	2937.73	1133.84	.283910E-02	.282538E-01
(000)	(100)	10	3	9	-1	2938.04	2066.48	.352979E-02	.101745E+01
(000)	(020)	6	0	5	-2	2938.13	662.20	.189043E+01	.194640E+01
(000)	(020)	6	0	6	-6	2938.81	662.20	.144600E-01	.148846E-01
(000)	(001)	10	1	9	-6	2939.56	1883.60	.817928E-03	.980467E-01
(000)	(001)	10	-1	9	-8	2939.96	1724.02	.218916E-01	.122077E+01
(000)	(020)	10	-3	9	-3	2940.41	1584.04	.186963E+00	.532795E+01
(000)	(020)	8	-1	7	-1	2940.71	1124.98	.148177E+01	.467324E+01
(000)	(020)	7	1	6	-1	2940.81	933.15	.324984E+01	.408534E+01
(000)	(020)	9	1	9	-5	2943.29	1481.97	.198830E-03	.346990E-02
(010)	(100)	8	-7	9	3	2943.74	2337.94	.564637E-06	.596986E-03
(000)	(100)	9	5	8	-1	2945.64	1820.70	.530968E-02	.469796E+00
(000)	(100)	10	-2	9	-8	2945.95	1618.13	.675389E-03	.678655E-01
(000)	(020)	10	0	10	-6	2947.49	1729.71	.174003E-03	.298383E-01
(000)	(010)	7	-6	8	8	2948.90	586.46	.855088E-06	.610064E-06
(010)	(020)	7	-7	7	7	2950.18	2180.84	.102560E-06	.509434E-04
(000)	(001)	9	8	10	-5	2950.39	2238.53	.649885E-03	.127693E+01
(000)	(020)	4	4	4	-2	2950.91	488.96	.145313E-03	.649149E-04
(000)	(020)	7	1	7	-5	2953.12	933.15	.149396E-01	.187271E-01
(000)	(020)	7	0	6	0	2953.85	929.72	.125489E+01	.463476E+01

(000)	(020)	8	2	7	0	2953.88	1260.01	.362600E+00	.652567E+01
(000)	(100)	9	4	8	0	2955.34	1820.70	.185473E 02	.490698E+00
(000)	(100)	7	6	7	-4	2955.42	1400.82	.273960E-05	.967994E-04
(000)	(020)	10	-9	9	-9	2955.48	1114.48	.411950E+01	.122925E+02
(000)	(020)	10	-10	9	-8	2955.55	1114.46	.137337E+01	.122929E+02
(010)	(100)	6	-6	7	6	2956.28	2041.91	.213095E-07	.162781E-04
(000)	(020)	8	1	7	1	2956.44	1259.29	.111926E+01	.668545E+01
(000)	(020)	5	3	5	-3	2956.69	611.56	.413727E-02	.110682E-02
(000)	(020)	6	2	6	-4	2958.53	759.38	.403388E-02	.657282E-02
(000)	(020)	10	2	9	0	2958.65	1884.06	.296484E-01	.106167E+02
(000)	(001)	8	5	7	-2	2961.79	1598.74	.143600E-01	.435935E+00
(000)	(010)	10	-7	10	7	2962.44	1293.92	.415009E-05	.292071E-04
(000)	(020)	10	1	9	1	2962.54	1883.60	.889112E-01	.105753E+02
(000)	(020)	7	1	8	-7	2962.96	933.15	.128662E-02	.160531E-02
(010)	(001)	7	-6	7	7	2964.66	2181.31	.198891E-06	.295595E-03
(000)	(100)	8	5	9	-9	2965.25	1598.74	.340336E-09	.103198E-07
(000)	(020)	10	-7	10	-9	2967.81	1293.92	.422988E+00	.297148E+01
(000)	(001)	10	3	10	-8	2968.06	2066.48	.175732E-05	.501416E-03
(000)	(020)	10	-8	10	-10	2968.49	1293.23	.141589E+00	.297345E+01
(000)	(001)	10	4	9	-3	2969.01	2066.51	.178808E-03	.153031E+00
(010)	(020)	6	-3	7	7	2969.35	2161.67	.153059E-05	.689028E-03
(000)	(020)	6	2	5	0	2969.42	759.38	.274134E+01	.445037E+01
(010)	(001)	7	-7	8	4	2969.63	2180.84	.604578E-06	.298337E-03
(000)	(020)	5	1	5	-5	2970.40	509.40	.128017E+00	.208877E-01
(000)	(100)	7	4	6	-4	2970.87	1221.05	.739198E-03	.109733E-01
(000)	(020)	8	-3	7	-3	2971.90	1007.08	.249482E+01	.442371E+01
(000)	(100)	8	3	8	-7	2972.08	1417.79	.646032E-04	.820758E-03
(000)	(001)	10	1	10	-10	2972.77	1883.60	.101290E-01	.120062E+01
(000)	(100)	8	6	7	0	2973.42	1598.74	.218749E-02	.198442E+00
(000)	(020)	7	-2	6	-2	2973.68	817.56	.176812E+01	.378856E+01
(000)	(020)	6	1	5	1	2973.79	758.34	.865052E+01	.465103E+01
(000)	(020)	9	-4	8	-4	2974.10	1217.27	.373319E+00	.543645E+01
(000)	(020)	5	1	4	-1	2974.36	509.40	.154417E+02	.251616E+01
(000)	(001)	9	9	9	0	2974.65	2238.53	.428122E-02	.278112E+01
(000)	(100)	8	1	7	-7	2974.70	1259.29	.625226E-03	.371162E-02
(000)	(001)	7	5	6	-6	2975.15	1221.06	.168297E+00	.831629E+00
(000)	(020)	9	-8	8	-8	2975.79	920.16	.306316E+01	.107268E+02
(000)	(020)	9	-9	8	-7	2975.99	920.12	.919440E+01	.107298E+02
(000)	(100)	8	5	7	1	2977.18	1598.74	.666063E-02	.201156E+00
(010)	(020)	8	-8	8	6	2977.77	2337.73	.843455E-07	.264210E-03
(000)	(020)	10	-5	9	-5	2978.01	1447.25	.475011E+00	.693658E+01
(000)	(001)	9	8	9	1	2978.08	2238.53	.608091E-03	.118370E+01
(000)	(100)	10	2	9	-4	2978.35	1884.06	.433409E-03	.154171E+00
(000)	(020)	10	-7	9	-7	2979.48	1293.92	.141945E+01	.993258E+01
(000)	(001)	9	5	8	-2	2979.76	1820.70	.488734E-03	.427476E-01
(000)	(020)	6	-1	5	-1	2980.75	649.73	.107290E+02	.341891E+01
(000)	(020)	6	2	7	-6	2980.76	759.38	.441778E-03	.714466E-03
(000)	(020)	7	3	6	1	2981.66	1063.23	.289437E+01	.669576E+01
(000)	(020)	7	2	6	2	2982.35	1063.04	.972932E+00	.674457E+01
(000)	(020)	10	-8	9	-6	2982.52	1293.23	.477219E+00	.997471E+01
(000)	(020)	4	0	3	-2	2984.07	315.91	.412621E+01	.795038E+00
(000)	(100)	9	9	10	-3	2985.78	2238.53	.122306E-10	.791552E-08
(000)	(020)	9	3	8	1	2988.54	1638.83	.296153E+00	.107984E+02
(000)	(100)	7	6	8	-8	2988.85	1400.82	.118383E-07	.413610E-06
(000)	(020)	9	-6	9	-8	2989.36	1080.65	.386253E+00	.290666E+01
(000)	(010)	10	-4	10	10	2989.67	1538.38	.780374E-08	.527148E-06
(000)	(020)	9	2	8	2	2990.02	1638.69	.977995E-01	.106855E+02
(000)	(020)	5	3	6	-5	2990.68	611.56	.860897E-03	.227694E-03
(000)	(020)	9	-7	9	-9	2990.73	1079.23	.117221E+01	.291910E+01
(000)	(020)	9	-6	8	-6	2990.92	1080.65	.108995E+01	.819792E+01
(000)	(001)	9	2	8	-5	2991.30	1638.69	.521240E-03	.569261E-01
(000)	(020)	4	2	4	-4	2991.60	384.29	.576010E-01	.153661E-01
(000)	(001)	8	6	7	-1	2991.84	1598.74	.100388E-03	.905079E-02
(000)	(001)	7	6	6	-1	2992.54	1400.82	.321650E-01	.112240E+01
(000)	(020)	5	0	4	0	2993.58	504.58	.680606E+01	.323018E+01
(000)	(020)	4	4	5	-4	2993.69	488.96	.921583E-04	.405811E-04

(000)	(100)	10 0	9 -6	2994.11	1729.71	.244133E-02	.412123E+00
(000)	(020)	5 5	6 -3	2994.70	743.96	.381326E-03	.190028E-03
(000)	(020)	6 6	7 -2	2994.95	1048.63	.463340E-04	.298493E-03
(000)	(020)	8 -7	7 -7	2995.54	744.13	.184618E+02	.920503E+01
(000)	(020)	8 -8	7 -6	2996.11	744.03	.616453E+01	.921473E+01
(010)	(020)	7 -4	8 6	2996.47	2319.03	.124849E-05	.355316E-02
(000)	(020)	5 3	4 1	2996.78	611.56	.173214E+02	.462470E+01
(000)	(020)	5 2	4 2	2997.85	611.33	.591579E+01	.467752E+01
(000)	(020)	9 -7	8 -5	2997.96	1079.23	.333545E+01	.828612E+01
(010)	(001)	6 -4	7 7	2999.66	2146.31	.140272E-07	.174211E-04
(000)	(020)	8 -5	7 -5	3000.42	885.85	.667031E+01	.655092E+01
(010)	(001)	8 -7	8 6	3001.02	2337.94	.585863E-07	.607605E-04
(000)	(100)	7 7	6 1	3001.21	1400.82	.473681E-02	.549382E-01
(000)	(001)	9 4	9 -7	3001.81	1820.70	.139470E-02	.363277E+00
(000)	(100)	6 5	5 -3	3001.84	1048.63	.707517E-03	.151583E-02
(000)	(100)	7 6	6 2	3002.36	1400.82	.158510E-02	.551316E-01
(000)	(020)	3 3	3 -3	3003.86	285.70	.846895E-01	.467484E-02
(000)	(020)	4 2	3 0	3005.38	384.29	.109401E+02	.290508E+01
(000)	(020)	6 4	7 -4	3006.64	891.26	.287352E-03	.867077E-03
(000)	(001)	7 7	6 0	3007.43	1400.82	.988147E-04	.114370E-02
(000)	(020)	7 -4	6 -4	3008.07	709.84	.402934E+01	.509203E+01
(000)	(020)	7 7	8 -1	3008.08	1400.82	.214474E-04	.248182E-03
(000)	(001)	9 0	8 -7	3010.12	1479.75	.296304E-01	.150079E+01
(000)	(020)	6 4	5 2	3010.14	891.26	.224908E+01	.677865E+01
(000)	(020)	8 -5	8 -7	3010.26	885.85	.289187E+01	.283082E+01
(000)	(020)	6 3	5 3	3010.27	891.23	.675865E+01	.678883E+01
(000)	(020)	9 1	10 -7	3010.98	1481.97	.519884E-03	.886881E-02
(000)	(020)	4 1	3 1	3011.85	382.96	.359378E+02	.315401E+01
(010)	(100)	7 -7	8 5	3012.09	2180.84	.230853E-06	.112312E-03
(000)	(001)	9 6	10 -7	3012.76	2022.04	.219131E-06	.149328E-03
(000)	(020)	8 -6	8 -8	3012.97	882.98	.992345E+00	.287177E+01
(000)	(100)	7 4	7 -6	3013.06	1221.05	.239257E-04	.350202E-03
(000)	(100)	9 3	8 -3	3013.13	1638.83	.381215E-03	.137866E-01
(000)	(020)	7 3	8 -5	3013.96	1063.23	.102942E-02	.235592E-02
(000)	(020)	7 6	8 0	3014.00	1400.82	.711687E-05	.246576E-03
(000)	(020)	7 -6	6 -6	3014.55	586.46	.110665E+02	.772348E+01
(000)	(100)	10 4	10 -6	3014.73	2066.51	.412701E-04	.347849E-01
(000)	(020)	8 -6	7 -4	3014.92	882.98	.229791E+01	.664570E+01
(000)	(020)	6 -3	5 -3	3015.12	553.13	.198490E+02	.393490E+01
(000)	(010)	8 -7	9 7	3015.20	744.13	.105384E-04	.523011E-05
(000)	(020)	10 -6	9 -4	3015.41	1438.35	.170067E+00	.705068E+01
(000)	(020)	8 2	9 -6	3015.74	1260.01	.281158E-03	.495617E-02
(000)	(020)	7 -7	6 -5	3016.02	586.22	.333486E+02	.774546E+01
(000)	(020)	7 5	8 -3	3016.08	1221.06	.274865E-03	.133980E-02
(000)	(020)	6 5	7 -1	3017.06	1048.63	.128509E-03	.273937E-03
(000)	(020)	8 4	7 2	3019.69	1417.81	.289357E+00	.108557E+02
(000)	(020)	8 3	7 3	3020.25	1417.79	.865675E+00	.108227E+02
(000)	(100)	9 8	10 -2	3022.78	2238.53	.118587E-09	.227426E-06
(000)	(020)	5 -2	4 -2	3023.47	416.40	.100701E+02	.310049E+01
(000)	(020)	4 4	3 2	3023.58	488.96	.107903E+02	.470445E+01
(000)	(020)	4 3	3 3	3023.71	488.94	.324288E+02	.471220E+01
(000)	(010)	8 -4	9 8	3024.46	982.95	.691256E-06	.321844E-05
(000)	(001)	8 7	9 -6	3024.92	1798.24	.259017E-06	.200385E-04
(000)	(001)	9 2	9 -9	3025.28	1638.69	.626393E-08	.676418E-06
(000)	(100)	9 5	9 -5	3025.52	1820.70	.142572E-03	.122816E-01
(000)	(020)	3 1	2 -1	3025.71	212.26	.309081E+02	.119106E+01
(000)	(100)	10 0	10-10	3027.03	1729.71	.906866E-04	.151424E-01
(000)	(100)	9 -1	8 -7	3027.66	1362.21	.105321E-01	.100622E+00
(000)	(001)	6 6	5 -5	3027.97	1048.63	.417977E+00	.266333E+01
(000)	(100)	7 7	7 -3	3028.92	1400.82	.276680E-04	.317961E-03
(010)	(001)	7 -5	8 6	3029.07	2309.89	.105397E-06	.946680E-04
(000)	(001)	8 5	8 -6	3029.67	1598.74	.265445E-05	.787773E-04
(000)	(100)	8 6	8 -4	3029.90	1598.74	.312819E-04	.278489E-02
(000)	(020)	7 -4	7 -6	3030.30	709.84	.217955E+01	.273417E+01
(000)	(020)	8 6	9 -2	3031.42	1598.74	.122999E-04	.109446E-02
(010)	(001)	8 -8	9 3	3032.10	2337.73	.155869E-06	.479508E-03

(000)	(020)	6	-5	5	-5	3032.55	447.25	.529525E+02	.628200E+01
(000)	(020)	3	3	2	1	3032.92	285.70	.566770E+02	.309858E+01
(000)	(100)	7	2	6	-6	3033.27	1063.04	.349502E-03	.238215E-02
(000)	(020)	3	2	2	2	3034.18	285.50	.192232E+02	.314852E+01
(000)	(020)	7	-5	6	-3	3034.43	704.23	.123732E+02	.502977E+01
(000)	(020)	4	-1	3	-1	3034.58	300.52	.430021E+02	.252271E+01
(000)	(020)	9	-5	8	-3	3035.07	1202.07	.115617E+01	.511293E+01
(000)	(020)	7	-5	7	-7	3035.44	704.23	.699461E+01	.284239E+01
(000)	(001)	9	4	10	-9	3035.68	1820.70	.738908E-02	.190316E+01
(000)	(020)	8	4	9	-4	3035.95	1417.81	.951053E-04	.354891E-02
(000)	(020)	6	-6	5	-4	3035.98	446.67	.178115E+02	.631446E+01
(000)	(001)	8	3	7	-4	3037.75	1417.79	.211663E-02	.263097E-01
(000)	(020)	5	5	4	3	3038.88	743.96	.139030E+02	.682760E+01
(000)	(020)	5	4	4	4	3038.90	743.95	.463539E+01	.682879E+01
(000)	(100)	9	8	9	2	3043.01	2238.53	.723714E-05	.137871E-01
(000)	(100)	9	9	9	3	3043.15	2238.53	.217153E-04	.137889E-01
(000)	(020)	9	-4	10	-10	3044.45	1217.27	.257608E-03	.366472E-02
(000)	(020)	8	8	9	0	3044.47	1798.24	.311582E-06	.718511E-04
(000)	(100)	10	1	9	-3	3045.16	1883.60	.784934E-02	.908287E+00
(000)	(100)	8	4	7	-2	3045.37	1417.81	.242355E-03	.901564E-02
(000)	(020)	10	-5	10	-7	3045.70	1447.25	.440127E+00	.628432E+01
(000)	(001)	10	-2	9	-9	3045.84	1618.13	.119918E-01	.116546E+01
(000)	(010)	9	1	10	9	3046.08	1481.97	.279017E-05	.470496E-04
(000)	(020)	8	5	9	-1	3046.14	1598.74	.361911E-04	.106825E-02
(000)	(020)	5	4	6	-2	3047.29	743.95	.961142E-04	.141204E-03
(000)	(020)	8	7	9	1	3047.90	1798.24	.119564E-05	.918016E-04
(000)	(100)	6	5	6	-5	3048.17	1048.63	.390374E-04	.823653E-04
(000)	(010)	9	0	10	10	3048.30	1479.75	.938974E-06	.469636E-04
(000)	(100)	9	1	8	-5	3048.57	1481.97	.230893E-01	.389028E+00
(000)	(020)	6	-3	6	-5	3049.11	553.13	.132577E+02	.259893E+01
(000)	(020)	3	0	2	0	3049.12	206.41	.190600E+02	.212607E+01
(000)	(020)	5	-4	4	-4	3049.26	326.63	.246887E+02	.490085E+01
(000)	(100)	10	2	10	-8	3050.91	1884.06	.174298E-03	.605261E-01
(000)	(001)	7	6	7	-5	3051.12	1400.82	.225249E-01	.770921E+00
(000)	(020)	7	5	6	3	3051.72	1221.06	.226877E+01	.109297E+02
(000)	(020)	7	4	6	4	3051.91	1221.05	.757182E+00	.109418E+02
(000)	(020)	9	3	10	-5	3053.53	1638.83	.201771E-03	.720047E-02
(000)	(020)	10	-6	10	-8	3053.75	1438.35	.157743E+00	.645762E+01
(000)	(001)	9	9	10	-4	3054.24	2238.53	.129631E-06	.820148E-04
(000)	(010)	9	-5	10	7	3054.29	1202.07	.906661E-05	.398430E-04
(000)	(020)	10	4	9	2	3054.54	2066.51	.272582E-01	.226754E+02
(000)	(001)	10	6	10	-3	3054.67	2269.59	.204790E-03	.451056E+00
(000)	(020)	10	3	9	3	3054.69	2066.48	.813520E-01	.225539E+02
(000)	(020)	5	-5	4	-3	3056.40	325.33	.747647E+02	.490486E+01
(000)	(020)	9	5	10	-3	3056.76	1820.70	.329858E-04	.281246E-02
(000)	(020)	6	-4	5	-2	3057.44	542.89	.620144E+01	.346283E+01
(000)	(100)	9	2	8	-2	3057.75	1638.69	.285464E-02	.304988E+00
(000)	(020)	6	-4	6	-6	3058.12	542.89	.510532E+01	.285014E+01
(000)	(020)	9	-4	9	-6	3058.48	1217.27	.423873E+00	.600235E+01
(000)	(020)	7	4	8	-2	3058.49	1221.05	.792215E-04	.114235E-02
(000)	(100)	9	7	10	-5	3059.20	2022.04	.569943E-06	.127498E-03
(000)	(020)	9	-5	10	-9	3059.66	1202.07	.385902E-03	.169286E-02
(000)	(020)	2	2	1	0	3060.03	136.22	.196757E+02	.156197E+01
(000)	(001)	9	7	9	-2	3060.20	2022.04	.558091E-05	.124806E-02
(000)	(020)	8	-4	7	-2	3060.63	982.95	.744632E+00	.342599E+01
(000)	(020)	8	-3	9	-9	3062.88	1007.08	.427432E-03	.735390E-03
(000)	(100)	8	8	9	-4	3064.17	1798.24	.113163E-06	.259278E-04
(000)	(020)	4	-3	3	-3	3064.71	224.65	.902471E+02	.364712E+01
(000)	(001)	8	8	8	-1	3064.88	1798.24	.490417E-02	.112337E+01
(000)	(001)	8	5	9	-8	3065.24	1598.74	.190673E-01	.559303E+00
(000)	(001)	10	2	9	-5	3065.98	1884.06	.542054E-02	.187307E+01
(000)	(020)	5	-2	5	-4	3066.25	416.40	.789852E+01	.239794E+01
(000)	(020)	2	1	1	1	3067.13	134.96	.715637E+02	.187795E+01
(010)	(100)	8	-7	8	7	3067.28	2337.94	.743752E-09	.754690E-06
(000)	(020)	8	-3	8	-5	3070.11	1007.08	.326489E+01	.560397E+01
(000)	(020)	9	7	10	-1	3070.12	2022.04	.123144E-05	.274498E-03

(000)	(020)	9 -5	9 -7	3071.33	1202.07	.148376E+01	.648420E+01
(000)	(100)	8 3	7 -1	3071.56	1417.79	.539891E-02	.663696E-01
(000)	(001)	8 3	8 -8	3072.03	1417.79	.172128E+00	.211567E+01
(010)	(100)	8 -8	9 4	3073.61	2337.73	.138755E-06	.421094E-03
(010)	(020)	8 -8	9 4	3073.61	2337.73	.273215E-06	.829151E-03
(000)	(001)	8 1	7 -6	3074.76	1259.29	.215791E+00	.123935E+01
(000)	(020)	9 6	10 0	3074.89	2022.04	.559026E-06	.373253E-03
(000)	(100)	7 5	6 -1	3075.36	1221.06	.318942E-02	.152468E-01
(000)	(001)	8 7	8 0	3076.91	1798.24	.293533E-01	.223251E+01
(000)	(020)	4 -4	3 -2	3077.95	222.03	.293545E+02	.349598E+01
(000)	(020)	7 -2	8 -8	3078.39	817.56	.249703E-05	.516840E-05
(000)	(001)	7 4	6 -3	3079.19	1221.05	.604991E-03	.866512E-02
(000)	(020)	4 3	5 -3	3079.31	488.94	.221002E-04	.315338E-05
(000)	(020)	3 -2	2 -2	3079.77	142.29	.321761E+02	.261290E+01
(000)	(020)	7 -2	7 -4	3080.34	817.56	.244254E+01	.505241E+01
(000)	(020)	5 -3	5 -5	3080.37	399.43	.314177E+02	.291752E+01
(000)	(010)	10 -5	10 9	3080.80	1447.25	.160358E-07	.226358E-06
(000)	(020)	4 -1	4 -3	3081.21	300.52	.362770E+02	.209598E+01
(000)	(100)	9 1	9 -9	3082.02	1481.97	.142237E-02	.237052E-01
(000)	(100)	9 3	9 -7	3083.53	1638.83	.124008E-02	.438235E-01
(000)	(020)	6 6	5 4	3083.99	1048.63	.176483E+01	.110411E+02
(000)	(020)	6 5	5 5	3084.03	1048.63	.530005E+01	.110526E+02
(000)	(020)	5 -3	4 -1	3084.33	399.43	.223943E+02	.207691E+01
(000)	(100)	6 3	5 -5	3085.59	891.23	.192667E-02	.188804E-02
(000)	(001)	9 6	9 -1	3085.67	2022.04	.127997E-05	.851634E-03
(000)	(020)	8 -4	9 -8	3087.06	982.95	.979841E-06	.446957E-05
(000)	(010)	9 -9	9 9	3087.29	920.12	.552339E-07	.621338E-07
(000)	(020)	6 3	7 -3	3087.75	891.23	.530615E-03	.519611E-03
(000)	(010)	9 -8	10 6	3087.97	920.16	.810902E-05	.273653E-04
(000)	(020)	9 4	10 -2	3088.32	1820.70	.103983E-04	.263258E-02
(000)	(100)	7 4	6 0	3088.33	1221.05	.177514E-03	.253495E-02
(000)	(020)	9 5	8 3	3088.57	1820.70	.290140E+00	.244833E+02
(000)	(020)	9 4	8 4	3088.59	1820.70	.966063E-01	.244561E+02
(000)	(020)	8 -4	8 -6	3088.62	982.95	.145556E+01	.663622E+01
(000)	(020)	6 -1	6 -3	3088.93	649.73	.140773E+02	.432879E+01
(000)	(001)	7 6	8 -7	3089.05	1400.82	.110165E+00	.372411E+01
(010)	(020)	6 -6	7 6	3089.10	2041.91	.710490E-07	.519402E-04
(000)	(020)	6 -1	7 -7	3089.94	649.73	.219615E-02	.675097E-03
(000)	(020)	3 2	4 -4	3090.39	285.50	.474503E-02	.763040E-03
(000)	(020)	7 -3	6 -1	3091.51	782.45	.362965E+01	.210725E+01
(000)	(020)	10 -4	9 -2	3091.78	1538.38	.592663E-01	.387126E+01
(000)	(001)	10 0	9 -7	3092.80	1729.71	.327729E-02	.535589E+00
(000)	(020)	3 0	3 -2	3093.57	206.41	.150366E+02	.165317E+01
(000)	(001)	9 3	8 -4	3093.68	1638.83	.321343E-01	.113187E+01
(000)	(100)	10 5	10 -1	3094.08	2269.59	.229169E-03	.166108E+00
(010)	(100)	7 -5	8 7	3095.33	2309.89	.788987E-08	.693501E-05
(000)	(020)	5 0	5 -2	3095.75	504.58	.749911E+01	.344164E+01
(000)	(020)	2 -1	1 -1	3095.95	79.50	.913665E+02	.182066E+01
(000)	(100)	8 2	7 -4	3096.23	1260.01	.169402E-01	.290855E+00
(000)	(020)	5 0	6 -6	3096.43	504.58	.358680E-02	.164577E-02
(000)	(020)	4 1	5 -5	3096.84	382.96	.203041E-01	.173305E-02
(000)	(100)	9 6	9 0	3097.11	2022.04	.951955E-04	.631047E-01
(000)	(100)	9 7	9 1	3099.65	2022.04	.286568E-03	.632697E-01
(000)	(001)	10 5	9 2	3100.03	2269.59	.629394E-02	.455326E+01
(000)	(001)	10 5	10 -2	3100.14	2269.59	.763817E-03	.552553E+00
(000)	(001)	10 6	9 3	3100.24	2269.59	.354224E-02	.768722E+01
(000)	(100)	8 0	7 -6	3100.27	1133.84	.135158E-01	.126562E+00
(000)	(020)	4 -2	4 -4	3100.40	275.49	.197718E+02	.302068E+01
(000)	(001)	9 9	8 6	3100.43	2238.53	.207257E-02	.129174E+01
(000)	(001)	9 8	8 5	3100.43	2238.53	.204388E-02	.382157E+01
(000)	(100)	10 6	10 0	3100.63	2269.59	.772016E-04	.167519E+00
(000)	(020)	4 1	4 -1	3100.80	382.96	.284178E+02	.242250E+01
(000)	(100)	8 7	8 1	3100.87	1798.24	.198740E-03	.149986E-01
(000)	(020)	3 -3	2 -1	3101.22	136.75	.807121E+02	.211279E+01
(000)	(100)	8 8	8 2	3101.69	1798.24	.663108E-04	.150092E-01
(000)	(020)	2 1	2 -1	3103.01	134.96	.391791E+02	.101624E+01

(010)	(001)	6 -5	7 6	3103.06	2042.91	.272572E-06	.664400E-04
(000)	(020)	7 -3	7 -5	3103.82	782.45	.118194E+02	.683473E+01
(000)	(100)	6 6	5 0	3103.83	1048.63	.253492E-02	.158819E-01
(000)	(020)	3 2	3 0	3104.17	285.50	.810134E+01	.129698E+01
(000)	(020)	5 2	6 -4	3106.58	611.33	.815026E-04	.621873E-04
(000)	(020)	8 3	9 -3	3106.66	1417.79	.222422E-03	.270337E-02
(000)	(020)	10 -3	10 -5	3108.32	1584.04	.342017E+00	.922006E+01
(000)	(100)	6 5	5 1	3108.89	1048.63	.190046E-02	.393149E-02
(000)	(020)	3 3	3 1	3109.11	285.70	.259396E+02	.138339E+01
(000)	(100)	8 4	8 -6	3110.07	1417.81	.667988E-03	.243323E-01
(000)	(020)	9 -2	9 -4	3110.36	1343.40	.320242E+00	.816404E+01
(000)	(020)	8 -1	8 -3	3112.16	1124.98	.232274E+01	.692195E+01
(000)	(001)	7 4	7 -7	3112.87	1221.05	.285482E-06	.404463E-05
(000)	(020)	7 -3	8 -7	3113.66	782.45	.396212E-02	.228391E-02
(000)	(020)	7 0	7 -2	3113.86	929.72	.158640E+01	.555809E+01
(000)	(020)	4 2	4 0	3113.87	384.29	.112120E+02	.287356E+01
(000)	(020)	4 -2	3 0	3114.18	275.49	.678711E+01	.103233E+01
(000)	(020)	1 0	0 0	3114.49	37.14	.246459E+02	.119538E+01
(000)	(001)	8 4	7 -3	3115.05	1417.81	.219421E-01	.797990E+00
(000)	(020)	6 -2	6 -4	3115.05	602.86	.929388E+01	.679059E+01
(000)	(100)	9 5	10 -7	3115.27	1820.70	.212675E-05	.177926E-03
(000)	(020)	6 1	6 -1	3115.62	758.34	.809233E+01	.415285E+01
(000)	(001)	6 5	5 -2	3116.14	1048.63	.759781E-03	.156810E-02
(000)	(020)	3 -1	3 -3	3116.19	173.37	.965351E+02	.299818E+01
(000)	(100)	10 -5	9 -9	3116.74	1447.25	.134573E+00	.187769E+01
(000)	(020)	5 2	5 0	3117.47	611.33	.363985E+01	.276754E+01
(000)	(100)	9 3	10 -9	3117.97	1638.83	.430924E-05	.150603E-03
(000)	(020)	2 2	2 0	3119.31	136.22	.196090E+02	.152709E+01
(000)	(020)	4 3	4 1	3119.40	488.94	.100163E+02	.141081E+01
(000)	(020)	9 9	10 1	3119.98	2238.53	.116565E-11	.721946E-09
(000)	(020)	4 4	4 2	3120.22	488.96	.337066E+01	.142405E+01
(000)	(020)	9 8	10 2	3120.40	2238.53	.502205E-11	.932996E-08
(000)	(020)	5 3	5 1	3120.57	611.56	.112852E+02	.286054E+01
(000)	(020)	3 1	3 -1	3121.08	509.40	.306938E+02	.476632E+01
(000)	(010)	8 -5	9 9	3121.56	883.83	.102362E-05	.966287E-06
(000)	(020)	5 -1	5 -3	3121.61	446.64	.536954E+02	.617032E+01
(000)	(100)	10 -1	9 -5	3122.20	1724.02	.828723E-01	.435159E+01
(000)	(001)	10 4	10 -5	3122.41	2066.51	.210455E-05	.171267E-02
(000)	(020)	3 1	3 -1	3122.84	212.26	.859669E+02	.320975E+01
(000)	(020)	8 6	7 4	3123.62	1598.74	.304538E+00	.262983E+02
(000)	(020)	8 5	7 5	3123.63	1598.74	.913467E+00	.262939E+02
(000)	(020)	4 0	4 -2	3123.96	315.91	.266107E+02	.489774E+01
(000)	(020)	6 2	6 0	3124.19	759.38	.292789E+01	.451774E+01
(000)	(100)	8 6	9 -6	3125.08	1598.74	.615922E-06	.531629E-04
(000)	(020)	9 -3	8 -1	3125.66	1283.24	.395332E+00	.250531E+01
(000)	(100)	10 -6	9 -8	3125.73	1438.35	.439037E-01	.175592E+01
(000)	(020)	6 -2	5 0	3125.94	602.86	.163148E+01	.118789E+01
(000)	(020)	2 -2	1 0	3126.17	70.08	.158630E+02	.897665E+00
(000)	(001)	10 0	10 -9	3126.67	1729.71	.408829E-04	.660890E-02
(000)	(020)	2 0	2 -2	3126.88	95.18	.408768E+02	.260840E+01
(000)	(001)	9 -1	8 -8	3127.61	1362.21	.144079E+00	.133252E+01
(000)	(020)	6 1	7 -5	3127.93	758.34	.454669E-03	.232410E-03
(000)	(020)	7 2	8 -4	3128.33	1063.04	.146506E-03	.968216E-03
(000)	(001)	9 6	8 3	3128.39	2022.04	.411835E-02	.270274E+01
(000)	(001)	9 7	8 4	3128.43	2022.04	.232353E-01	.508279E+01
(000)	(020)	6 0	6 -2	3129.04	662.20	.728016E+01	.703836E+01
(000)	(100)	8 2	8 -8	3129.66	1260.01	.357722E-02	.607630E-01
(000)	(100)	7 7	8 -5	3129.72	1400.82	.891663E-06	.991698E-05
(000)	(100)	7 5	7 -5	3130.10	1221.06	.188418E-02	.884965E-02
(000)	(100)	8 7	9 -3	3130.52	1798.24	.172956E-06	.129292E-04
(000)	(100)	5 4	4 -4	3131.30	743.95	.349124E-03	.499148E-03
(000)	(001)	7 5	6 -2	3132.47	1221.06	.835837E-01	.392280E+00
(000)	(020)	7 1	7 -1	3132.54	933.15	.558297E+01	.658872E+01
(000)	(020)	1 1	1 -1	3133.08	42.37	.107551E+03	.177240E+01
(000)	(001)	7 2	6 -5	3133.52	1063.04	.261163E+00	.172310E+01
(010)	(020)	7 -7	8 5	3134.66	2180.84	.613324E-06	.286719E-03

(000)	(020)	7 -1	7 -3	3136.01	842.97	.121078E+02	.926261E+01
(000)	(020)	6 -2	7 -6	3137.28	602.86	.141271E-01	.102489E-01
(000)	(100)	7 3	6 -3	3138.06	1063.23	.783062E-01	.172123E+00
(000)	(100)	10 -3	9 -7	3138.32	1584.04	.179726E+00	.479872E+01
(000)	(001)	9 5	9 -4	3138.59	1820.70	.115439E-01	.958605E+00
(000)	(020)	10 -4	10 -6	3138.82	1538.38	.179621E+00	.115570E+02
(000)	(020)	8 -2	8 -4	3140.73	1050.64	.175716E+01	.108991E+02
(000)	(100)	10 6	9 4	3141.75	2269.59	.462768E-01	.991011E+02
(000)	(020)	10 6	9 4	3141.75	2269.59	.544682E-02	.116643E+02
(000)	(020)	7 0	8 -6	3141.85	929.72	.694645E-04	.241206E-03
(000)	(010)	10-10	10 8	3141.90	1114.46	.100683E-06	.847750E-06
(000)	(020)	9 -3	9 -5	3142.02	1283.24	.184451E+01	.116283E+02
(000)	(100)	6 6	6 -4	3143.29	1048.63	.243064E-03	.149197E-02
(000)	(020)	3 -1	2 1	3145.25	173.37	.117371E+02	.361088E+00
(000)	(020)	8 0	8 -2	3145.70	1133.84	.995253E+00	.918494E+01
(000)	(100)	8 4	9 -8	3146.27	1417.81	.214686E-05	.773023E-04
(000)	(001)	9 1	8 -6	3146.44	1481.97	.294009E-01	.479964E+00
(000)	(001)	10 3	9 0	3146.70	2066.48	.308117E-01	.829241E+01
(000)	(001)	6 5	6 -6	3147.58	1048.63	.302149E+01	.617371E+01
(000)	(020)	8 -1	9 -7	3148.42	1124.98	.191158E-05	.563104E-05
(000)	(020)	9 -2	10 -8	3148.70	1343.40	.235405E-04	.592818E-03
(000)	(001)	6 6	5 -1	3148.71	1048.63	.121711E+00	.745799E+00
(000)	(100)	9 0	8 -4	3148.89	1479.75	.491316E-01	.237886E+01
(000)	(020)	8 1	8 -1	3149.61	1259.29	.114481E+01	.641869E+01
(000)	(001)	10 4	9 1	3150.10	2066.51	.652706E-02	.526498E+01
(000)	(020)	9 0	9 -2	3150.41	1479.75	.171209E+00	.828561E+01
(000)	(001)	10 2	10 -7	3150.74	1884.06	.400940E-03	.134818E+00
(000)	(001)	8 6	8 -3	3150.78	1598.74	.332148E-06	.284353E-04
(000)	(020)	7 2	7 0	3150.85	1063.04	.713825E+00	.468376E+01
(000)	(001)	8 8	9 -5	3151.80	1798.24	.504426E-02	.112360E+01
(000)	(020)	7 3	7 1	3152.50	1063.23	.217348E+01	.475561E+01
(000)	(020)	10 -1	10 -3	3153.44	1724.02	.197199E+00	.102522E+02
(000)	(020)	6 3	6 1	3153.66	891.23	.320983E+01	.307757E+01
(000)	(020)	6 4	6 2	3154.13	891.26	.107579E+01	.309438E+01
(000)	(020)	8 2	8 0	3154.81	1260.01	.393394E+00	.662895E+01
(000)	(020)	5 -1	6 -5	3155.60	446.64	.250888E+00	.285198E-01
(000)	(020)	5 4	5 2	3157.45	743.95	.109370E+01	.155072E+01
(000)	(020)	5 5	5 3	3157.54	743.96	.328503E+01	.155261E+01
(010)	(001)	7 -6	8 5	3157.65	2181.31	.752762E-07	.105039E-03
(000)	(100)	10 3	10 -3	3157.83	2066.48	.181006E-02	.485427E+00
(000)	(001)	8 7	7 4	3158.26	1798.24	.155015E-01	.114862E+01
(000)	(001)	8 8	7 5	3158.27	1798.24	.169903E-01	.377679E+01
(000)	(020)	7 6	6 6	3158.90	1400.82	.849389E+00	.280787E+02
(000)	(020)	7 7	6 5	3158.90	1400.82	.254821E+01	.280791E+02
(000)	(020)	9 2	10 -4	3159.52	1638.69	.434857E-04	.449634E-02
(000)	(001)	7 7	7 -2	3159.71	1400.82	.272808E+00	.300534E+01
(000)	(020)	5 -1	4 1	3161.70	446.64	.520736E+01	.590808E+00
(000)	(100)	9 6	10 -4	3161.97	2022.04	.163018E-06	.105847E-03
(000)	(020)	9 -1	9 -3	3162.24	1362.21	.132514E+01	.121214E+02
(000)	(001)	9 7	10 -6	3162.35	2022.04	.104721E-02	.226622E+00
(000)	(020)	9 1	9 -1	3162.91	1481.97	.553364E+00	.898651E+01
(000)	(020)	8 -2	7 0	3163.25	1050.64	.259815E+00	.160007E+01
(000)	(100)	9 4	9 -2	3163.27	1820.70	.954929E-03	.236035E+00
(000)	(100)	7 1	6 -5	3163.65	933.15	.109936E+00	.128464E+00
(000)	(020)	2 2	3 -2	3163.76	136.22	.125665E+01	.964694E-01
(010)	(001)	7 -3	8 8	3164.70	2393.01	.106688E-05	.136632E-02
(000)	(020)	8 1	9 -5	3165.97	1259.29	.201383E-03	.112328E-02
(000)	(100)	9 9	8 7	3166.69	2238.53	.220083E+00	.134298E+03
(000)	(100)	9 8	8 8	3166.69	2238.53	.733609E-01	.134298E+03
(000)	(020)	4 0	5 -4	3166.74	315.91	.346718E+00	.629519E-01
(000)	(100)	8 5	8 -1	3167.60	1598.74	.313694E-02	.890429E-01
(000)	(100)	7 5	8 -7	3168.81	1221.06	.739332E-05	.343089E-04
(000)	(020)	3 1	4 -3	3169.47	212.26	.281959E+01	.103726E+00
(000)	(020)	4 -3	3 1	3169.96	224.85	.628295E+01	.245480E+00
(000)	(100)	8 1	7 -3	3170.45	1259.29	.190948E+00	.106356E+01
(000)	(100)	7 3	7 -7	3170.76	1063.23	.360856E-02	.785011E-02

(000)	(100)	9 7	8 5	3170.89	2022.04	.463534E+00	.100042E+03
(000)	(100)	9 6	8 6	3170.89	2022.04	.154511E+00	.100041E+03
(000)	(100)	7 6	7 0	3171.34	1400.82	.627150E-03	.206507E-01
(000)	(020)	5 -4	4 0	3171.53	326.63	.121151E+01	.231220E+00
(000)	(001)	9 4	8 1	3171.85	1820.70	.279381E-01	.688695E+01
(000)	(100)	9 -4	8 -8	3172.40	1217.27	.142172E+00	.194096E+01
(000)	(100)	10 -3	10 -9	3172.76	1584.04	.104286E-02	.275423E-01
(000)	(001)	5 5	8 2	3172.91	1820.70	.466237E-01	.382975E+01
(000)	(020)	7 -4	6 0	3173.73	709.84	.620073E+00	.742708E+00
(000)	(100)	6 4	5 -2	3175.00	891.26	.266389E-01	.761197E-01
(000)	(100)	7 7	7 1	3175.10	1400.82	.190927E-02	.209312E-01
(000)	(010)	9 -6	10 8	3175.71	1080.65	.156589E-05	.110923E-04
(000)	(100)	8 6	8 0	3177.30	1598.74	.109576E-02	.930257E-01
(000)	(020)	3 -2	2 2	3177.39	142.29	.202330E+01	.159257E+00
(000)	(020)	1 -1	1 1	3178.30	23.79	.114963E+03	.170841E+01
(000)	(020)	6 -3	5 1	3179.00	553.13	.356087E+01	.669521E+00
(000)	(020)	10 0	10 -2	3179.31	1729.71	.743657E-01	.118225E+02
(000)	(020)	8 -5	7 -1	3179.84	885.85	.721782E+00	.668865E+00
(000)	(020)	10 -2	10 -4	3180.08	1618.13	.159455E+00	.148430E+02
(000)	(001)	9 1	9 -8	3182.01	1481.97	.531396E-01	.857796E+00
(000)	(020)	6 -5	5 -1	3183.23	447.25	.156564E+01	.176947E+00
(000)	(100)	9 5	9 -1	3183.82	1820.70	.325611E-02	.266546E+00
(000)	(001)	9 3	9 -6	3184.33	1638.83	.283654E-03	.970676E-02
(000)	(100)	9 -2	8 -6	3184.48	1343.40	.160889E+00	.400612E+01
(000)	(020)	1 0	2 -2	3184.92	37.14	.164749E+02	.781400E+00
(000)	(100)	10 -4	9 -6	3185.44	1538.38	.835715E-01	.529837E+01
(000)	(020)	2 -2	2 0	3185.45	70.08	.424422E+02	.235705E+01
(000)	(100)	6 6	7 -6	3185.48	1048.63	.142838E-05	.863152E-05
(000)	(001)	6 3	5 -4	3186.26	891.23	.117076E+01	.111104E+01
(000)	(100)	9 -5	8 -7	3187.80	1202.07	.410310E+00	.172758E+01
(000)	(100)	7 2	6 -2	3188.69	1063.04	.609222E-01	.394997E+00
(000)	(001)	7 6	7 -1	3189.76	1400.82	.201683E-01	.660262E+00
(000)	(001)	8 2	7 -5	3191.93	1260.01	.204445E-01	.340497E+00
(000)	(020)	5 -2	4 2	3192.78	416.40	.156511E+01	.456326E+00
(000)	(100)	10 4	10 -2	3194.80	2066.51	.810461E-03	.644603E+00
(000)	(020)	0 0	1 0	3196.25	0.00	.283331E+02	.112063E+01
(000)	(020)	4 0	3 2	3196.63	315.91	.119008E+01	.214058E+00
(000)	(020)	9 0	10 -6	3197.45	1479.75	.298031E-04	.991948E-03
(000)	(020)	9 -4	8 0	3197.55	1217.27	.103937E+00	.140780E+01
(000)	(020)	10 -3	9 -1	3197.63	1447.25	.118108E+00	.160628E+01
(000)	(100)	10 1	10 -5	3197.64	1883.60	.603843E-01	.665418E+01
(000)	(020)	3 3	4 -1	3198.06	285.70	.224715E+01	.116510E+00
(000)	(020)	3 -3	3 -1	3198.35	136.75	.967858E+02	.245661E+01
(000)	(001)	8 5	7 2	3198.57	1598.74	.170416E+00	.479046E+01
(000)	(001)	10 1	9 -2	3198.64	1883.60	.484461E-01	.533696E+01
(000)	(001)	8 6	7 3	3198.83	1598.74	.278707E-01	.235017E+01
(000)	(020)	9 -6	8 -2	3198.89	1080.65	.768518E-01	.540449E+00
(000)	(100)	8 7	7 7	3199.95	1798.24	.136136E+01	.995587E+02
(000)	(100)	8 8	7 6	3199.95	1798.24	.453784E+00	.995585E+02
(000)	(001)	8 0	7 -7	3200.08	1133.84	.195430E+00	.177293E+01
(000)	(020)	2 1	3 -1	3200.14	134.96	.115597E+02	.290738E+00
(000)	(001)	8 5	8 -2	3201.72	1598.74	.195245E-04	.548302E-03
(000)	(020)	7 -1	6 1	3201.92	842.97	.131015E+01	.981649E+00
(000)	(020)	9 2	9 0	3204.02	1638.69	.720702E-01	.734843E+01
(000)	(020)	7 -6	6 -2	3204.78	586.46	.199781E+00	.131154E+00
(000)	(100)	6 4	6 -6	3205.05	891.26	.690229E-04	.195381E-03
(000)	(100)	6 3	5 -1	3205.77	891.23	.127252E+00	.120025E+00
(000)	(020)	9 3	9 1	3207.31	1638.83	.227263E+00	.772131E+01
(010)	(110)	5 3	4 -3	3207.76	2252.71	.249265E-03	.160722E+00
(000)	(100)	5 5	4 -1	3207.96	743.96	.439915E-01	.204651E-01
(000)	(020)	10 1	10 -1	3208.56	1883.60	.300034E-01	.329504E+01
(000)	(020)	8 -3	7 1	3208.65	1007.08	.943332E+00	.154958E+01
(000)	(020)	8 3	8 1	3209.58	1417.79	.476524E+00	.560607E+01
(000)	(020)	9 -3	10 -7	3209.71	1283.24	.179730E-02	.110916E-01
(000)	(020)	2 -1	3 -3	3210.06	79.50	.918470E+02	.176518E+01
(000)	(020)	8 4	8 2	3210.90	1417.81	.160307E+00	.565600E+01

(000)	(100)	10 -1	10 -7	3211.95	1724.02	.143047E-02	.730144E-01
(000)	(020)	4 -1	3 3	3212.13	300.52	.354785E+01	.196630E+00
(000)	(001)	8 4	8 -5	3212.18	1417.81	.868689E-02	.306372E+00
(000)	(020)	3 2	4 0	3212.66	285.50	.956483E+00	.147956E+00
(000)	(020)	10 2	10 0	3212.87	1884.06	.306142E-01	.100951E+02
(000)	(001)	9 5	10 -6	3213.34	1820.70	.189156E-04	.146098E-02
(000)	(020)	1 -1	2 -1	3214.18	23.79	.112940E+03	.165961E+01
(000)	(001)	9 4	9 -3	3214.82	1820.70	.703921E-03	.171689E+00
(000)	(100)	10 4	9 2	3215.03	2066.51	.805353E-01	.636510E+02
(000)	(100)	10 3	9 3	3215.20	2066.48	.241664E+00	.636538E+02
(000)	(020)	4 2	5 -2	3216.04	384.29	.854452E+00	.212033E+00
(000)	(020)	7 4	7 2	3216.45	1221.05	.273201E+00	.374600E+01
(000)	(001)	10 -5	9 -8	3216.73	1447.25	.278154E+00	.376044E+01
(000)	(020)	7 5	7 3	3216.98	1221.06	.822940E+00	.376081E+01
(000)	(001)	9 3	10-10	3217.54	1638.83	.213478E-01	.722991E+00
(000)	(020)	4 -4	4 -2	3217.84	222.03	.197060E+02	.224486E+01
(000)	(100)	10 -4	10-10	3218.36	1538.38	.641409E-03	.402489E-01
(000)	(100)	6 2	5 -4	3218.61	759.38	.669465E-01	.100268E+00
(010)	(001)	8 -7	9 4	3218.89	2337.94	.214812E-06	.207705E-03
(010)	(001)	8 -8	8 7	3219.98	2337.73	.203657E-06	.589963E-03
(000)	(001)	9 8	10 -1	3220.53	2238.53	.536249E-03	.965268E+00
(000)	(100)	9 -2	9 -8	3220.68	1343.40	.222564E-02	.547955E-01
(000)	(020)	3 -1	3 1	3221.44	173.37	.841314E+02	.252705E+01
(000)	(020)	4 -2	4 0	3222.67	273.49	.250037E+02	.367507E+01
(000)	(001)	10 2	9 -1	3223.65	1884.06	.230609E-01	.757894E+01
(000)	(100)	5 4	4 0	3223.67	743.95	.179969E-01	.249931E-01
(000)	(100)	9 2	9 -4	3223.72	1638.69	.354375E-02	.359120E+00
(000)	(001)	8 6	9 -7	3223.77	1598.74	.469919E-05	.393190E-03
(010)	(100)	7 -6	8 8	3223.91	2181.31	.526206E-09	.719167E-06
(000)	(020)	6 5	6 3	3224.15	1048.63	.957721E+00	.191041E+01
(000)	(020)	6 6	6 4	3224.33	1048.63	.320234E+00	.191625E+01
(000)	(001)	9 2	8 -1	3224.43	1638.69	.443514E-01	.449354E+01
(000)	(020)	2 0	2 2	3224.50	95.18	.206430E+02	.127738E+01
(000)	(020)	10 -2	9 0	3224.58	1618.13	.898494E-01	.824826E+01
(000)	(020)	8 -2	9 -6	3225.11	1050.64	.632241E-02	.351898E-01
(000)	(001)	10 -6	9 -9	3225.62	1438.35	.867256E-01	.336117E+01
(000)	(100)	8 -1	7 -5	3226.18	1124.98	.102171E+01	.293717E+01
(000)	(001)	10 3	10 -4	3226.29	2066.43	.141394E-03	.371149E-01
(000)	(001)	7 6	6 3	3226.52	1400.82	.117083E+00	.378935E+01
(000)	(001)	7 7	6 4	3226.57	1400.82	.960163E-01	.103583E+01
(000)	(100)	8 -3	7 -7	3226.91	1007.08	.857439E+00	.140022E+01
(000)	(001)	7 7	8 -6	3227.59	1400.82	.516862E-05	.557417E-04
(000)	(100)	7 6	8 -4	3227.82	1400.82	.167731E-03	.542639E-04
(000)	(020)	7 -2	6 2	3227.83	817.36	.497537E+00	.982172E+00
(000)	(020)	5 1	6 -3	3229.26	509.40	.150469E+01	.225861E+00
(000)	(001)	7 3	6 -4	3229.55	1063.23	.800425E-01	.170955E+00
(000)	(001)	9 9	10 0	3229.61	2238.53	.176814E-05	.105792E-02
(000)	(001)	8 2	8 -7	3229.86	1260.01	.444631E-03	.731823E-02
(000)	(020)	2 -2	3 -2	3229.90	70.08	.429916E+02	.235470E+01
(000)	(020)	10 -7	9 -3	3230.53	1293.92	.702638E-01	.453473E+00
(000)	(020)	5 -3	5 -1	3231.05	399.43	.488907E+02	.432837E+01
(000)	(100)	5 5	5 -5	3232.86	743.96	.415762E-03	.191925E-03
(000)	(001)	5 4	4 -3	3233.09	743.95	.198773E+01	.275241E+01
(000)	(020)	3 0	4 -2	3233.46	206.41	.721944E+01	.759389E+00
(000)	(020)	3 -2	4 -4	3233.60	142.29	.373069E+02	.288544E+01
(000)	(100)	8 3	8 -3	3234.17	1417.79	.494388E-02	.577201E-01
(000)	(020)	7 -1	8 -5	3234.22	842.97	.122488E+00	.908598E-01
(000)	(001)	7 5	7 -4	3234.48	1221.06	.370367E-03	.168341E-02
(000)	(010)	10 -8	10 10	3234.82	1293.23	.191771E-08	.369571E-07
(000)	(020)	8 -7	7 -3	3234.85	744.13	.230838E+00	.106581E+00
(000)	(100)	10 2	9 0	3235.09	1884.06	.169035E+00	.553565E+02
(000)	(001)	10 -1	9 -4	3235.27	1724.02	.141904E+00	.719089E+01
(000)	(020)	6 0	7 -4	3235.70	662.20	.177953E+00	.166371E+00
(000)	(001)	9 3	8 0	3236.32	1638.83	.208479E+00	.701964E+01
(000)	(100)	10 1	9 1	3238.09	1883.60	.506700E+00	.551395E+02
(010)	(001)	7 -4	8 7	3238.68	2319.03	.207940E-08	.547531E-05

(000)	(001)	10 -3	9 -6	3239.12	1584.04	.916297E-01	.237040E+01
(000)	(020)	2 -1	2 1	3239.12	79.50	.478601E+02	.911555E+00
(000)	(020)	6 0	5 2	3239.20	662.20	.570190E+00	.532505E+00
(000)	(020)	4 4	5 0	3239.84	468.96	.231247E+00	.940909E-01
(000)	(100)	9 5	8 3	3241.11	1820.70	.728867E+00	.586105E+02
(000)	(100)	9 4	8 4	3241.14	1820.70	.242966E+00	.586124E+02
(000)	(100)	7 4	7 -2	3242.13	1221.05	.127134E-02	.172939E-01
(000)	(020)	5 -5	5 -3	3242.92	325.33	.327523E+02	.202510E+01
(000)	(020)	4 3	5 1	3243.19	488.94	.727270E+00	.985272E-01
(000)	(100)	9 0	9 -6	3244.07	1479.75	.271951E-02	.127810E+00
(000)	(100)	10 -2	9 -4	3244.28	1618.13	.115074E+00	.104997E+02
(000)	(010)	9 -3	10 9	3244.81	1283.24	.125244E-06	.764554E-06
(000)	(020)	3 -3	4 -3	3244.98	136.75	.129057E+03	.322865E+01
(000)	(001)	8 4	9 -9	3246.16	1417.81	.555612E-01	.193904E+01
(000)	(100)	9 -3	8 -5	3247.30	1283.24	.965640E+00	.589027E+01
(000)	(020)	3 -2	3 0	3247.38	142.29	.183068E+02	.140990E+01
(000)	(100)	8 3	9 -5	3247.48	1598.74	.148200E-04	.410321E-03
(000)	(020)	4 1	5 -1	3247.52	382.96	.457826E+01	.372644E+00
(000)	(100)	6 5	6 -1	3247.79	1048.63	.317247E-02	.628221E-02
(000)	(020)	6 -4	6 -2	3248.35	542.89	.825643E+01	.433936E+01
(010)	(110)	4 4	3 -2	3249.62	2129.84	.473448E-04	.501555E-01
(000)	(001)	8 3	7 0	3250.10	1417.79	.287446E+00	.333950E+01
(000)	(100)	8 -4	7 -6	3251.16	982.95	.395756E+00	.171413E+01
(000)	(001)	6 6	6 -3	3251.61	1048.63	.161636E+00	.959097E+00
(000)	(020)	6 -1	5 3	3251.77	649.73	.186782E+01	.545592E+00
(000)	(100)	10 0	9 -2	3254.26	1729.71	.246615E+00	.383034E+02
(000)	(001)	8 4	7 1	3254.68	1417.81	.176460E+00	.614219E+01
(000)	(020)	4 -3	5 -5	3254.95	224.85	.105604E+03	.401828E+01
(000)	(100)	10 5	9 5	3255.06	2269.59	.169315E-01	.116654E+02
(000)	(020)	10 5	9 5	3255.06	2269.59	.143831E+00	.990971E+02
(000)	(020)	4 -3	4 -1	3258.91	224.85	.443555E+02	.168570E+01
(000)	(001)	6 4	5 -3	3259.65	691.26	.187869E-01	.522856E-01
(000)	(100)	9 3	8 1	3260.28	1638.83	.157789E+01	.527384E+02
(000)	(100)	9 4	10 -6	3260.54	1820.70	.626123E-05	.150146E-02
(000)	(020)	4 -4	5 -4	3260.62	222.03	.373335E+02	.419714E+01
(000)	(100)	6 6	6 0	3260.75	1048.63	.100225E-04	.593039E-04
(010)	(110)	6 1	5 -3	3261.05	2399.96	.138412E-02	.177852E+01
(000)	(100)	9 2	8 2	3261.24	1638.69	.525768E+00	.526678E+02
(000)	(020)	10 -3	9 1	3262.10	1584.04	.122334E+00	.314240E+01
(000)	(100)	7 0	6 -4	3262.20	929.72	.523265E+00	.174994E+01
(000)	(020)	3 3	6 -1	3262.40	611.56	.849467E+00	.205959E+00
(000)	(001)	7 1	6 -6	3263.06	933.15	.163926E+01	.185719E+01
(000)	(010)	8 -8	9 8	3263.38	744.03	.154339E-06	.212085E-06
(000)	(100)	8 -1	8 -7	3264.89	1124.98	.228047E-01	.647808E-01
(000)	(020)	9 -1	8 1	3265.16	1362.21	.559979E+00	.496081E+01
(000)	(100)	5 3	4 -3	3266.26	611.56	.230746E+00	.556798E-01
(000)	(020)	4 -1	5 -3	3267.73	300.52	.263457E+02	.143529E+01
(000)	(100)	8 6	7 4	3268.09	1598.74	.649860E+00	.536376E+02
(000)	(100)	8 5	7 5	3268.10	1598.74	.194961E+01	.536382E+02
(000)	(100)	7 5	7 -1	3268.29	1221.06	.101999E-02	.458514E-02
(000)	(001)	7 5	8 -8	3268.76	1221.06	.140668E+00	.632663E+00
(000)	(001)	9 0	8 -3	3269.77	1479.75	.157138E+00	.732707E+01
(000)	(001)	7 3	7 -6	3270.82	1063.23	.829954E+00	.175026E+01
(000)	(020)	9 -8	8 -4	3271.21	920.16	.326497E-01	.104010E+00
(000)	(020)	6 -6	6 -4	3271.24	446.67	.579104E+01	.190536E+01
(000)	(100)	8 1	8 -5	3271.25	1259.29	.214545E-01	.115818E+00
(000)	(020)	5 2	6 0	3272.24	611.33	.325383E+00	.235701E+00
(000)	(001)	10 -3	10-10	3272.33	1584.04	.641892E-02	.164368E+00
(000)	(001)	9 -4	8 -7	3272.60	1217.27	.308163E+00	.407828E+01
(000)	(020)	5 1	4 3	3273.44	509.40	.135332E+01	.200371E+00
(000)	(020)	5 -4	5 -2	3273.70	326.63	.982837E+01	.181635E+01
(000)	(020)	5 -4	6 -6	3274.38	326.63	.275581E+02	.509434E+01
(000)	(020)	7 -5	7 -3	3274.75	704.23	.105866E+02	.398769E+01
(000)	(001)	7 4	6 1	3276.16	1221.05	.155944E+00	.209926E+01
(000)	(020)	1 1	2 1	3276.25	42.37	.100751E+03	.158779E+01
(010)	(110)	6 1	6 -5	3276.91	2399.96	.142707E-03	.182483E+00

(000)	(020)	5	-5	6	-5	3276.91	325.33	.846247E+02	.517813E+01
(000)	(100)	9	0	10	-10	3276.99	1479.75	.393383E-04	.183023E-02
(000)	(001)	7	5	6	2	3277.52	1221.06	.102206E+01	.458450E+01
(000)	(020)	5	0	4	4	3278.27	504.58	.470211E+00	.203784E+00
(000)	(100)	8	4	8	-2	3278.63	1417.81	.124635E-02	.430659E-01
(000)	(100)	7	-2	6	-6	3278.75	817.56	.718361E+00	.139601E+01
(010)	(110)	5	2	4	-2	3279.15	2252.54	.316083E-03	.597618E+00
(000)	(100)	10	-1	9	-1	3280.50	1724.02	.782360E+00	.390990E+02
(000)	(020)	6	-2	6	0	3280.71	602.86	.604148E+01	.419132E+01
(000)	(100)	9	-3	9	-9	3280.75	1283.24	.127291E-01	.768542E-01
(000)	(020)	6	-6	5	0	3282.13	446.67	.185250E+00	.607485E-01
(000)	(020)	1	0	2	2	3282.54	37.14	.299442E+02	.137801E+01
(000)	(020)	5	-5	4	1	3283.01	325.33	.559567E+00	.341759E-01
(000)	(020)	7	-3	7	-1	3283.24	782.45	.975408E+01	.533220E+01
(010)	(110)	7	-3	6	-5	3283.86	2393.01	.201656E-02	.248883E+01
(000)	(001)	8	7	9	-2	3284.00	1798.24	.877571E-05	.625360E-03
(000)	(001)	10	-4	9	-7	3284.13	1538.38	.327911E-01	.201646E+01
(000)	(020)	6	2	7	-2	3284.20	759.38	.198554E+00	.291443E+00
(000)	(100)	9	1	8	-1	3284.37	1481.97	.244104E+01	.381759E+02
(000)	(001)	5	5	4	-2	3284.43	743.96	.168702E-01	.766539E-02
(000)	(001)	6	6	7	-7	3285.29	1048.63	.647425E+00	.380224E+01
(000)	(020)	9	-2	8	2	3285.31	1343.40	.102075E+00	.246367E+01
(000)	(020)	5	-1	5	1	3285.49	446.64	.274847E+02	.300083E+01
(000)	(100)	8	4	7	2	3285.92	1417.81	.144870E+01	.499467E+02
(010)	(110)	6	-1	5	-5	3285.93	2272.74	.272362E-02	.188718E+01
(000)	(100)	8	3	7	3	3286.15	1417.79	.434533E+01	.499295E+02
(000)	(001)	9	-2	8	-5	3286.59	1343.40	.115635E+00	.278986E+01
(000)	(020)	5	0	6	-2	3286.66	504.58	.159307E+01	.689520E+00
(000)	(100)	9	9	10	1	3287.58	2238.53	.113801E-05	.668694E-03
(000)	(020)	7	-7	6	-1	3287.74	586.22	.392478E+00	.836222E-01
(000)	(001)	9	-5	8	-8	3287.75	1202.07	.865015E+00	.353136E+01
(000)	(100)	9	8	10	2	3288.10	2238.53	.379935E-06	.669844E-03
(000)	(100)	9	-1	8	-3	3289.75	1362.21	.178878E+01	.157282E+02
(000)	(100)	9	3	9	-3	3289.93	1638.83	.518877E-02	.171863E+00
(000)	(020)	4	-4	3	2	3290.51	222.03	.966310E-01	.107649E-01
(000)	(020)	6	-5	6	-3	3291.41	447.25	.170302E+02	.186148E+01
(010)	(100)	8	-7	9	7	3291.59	2337.94	.530694E-08	.501802E-05
(000)	(020)	10	3	10	1	3292.03	2066.43	.419827E-01	.108001E+02
(000)	(100)	6	1	5	-3	3292.13	758.34	.160388E+01	.778918E+00
(000)	(020)	10	4	10	2	3292.42	2066.51	.137813E-01	.106360E+02
(000)	(020)	6	-5	7	-7	3292.42	447.25	.558717E+02	.610515E+01
(000)	(100)	7	2	7	-4	3293.20	1063.04	.121913E-01	.765351E-01
(000)	(020)	4	0	4	2	3293.27	315.91	.114009E+02	.199048E+01
(000)	(020)	9	6	8	6	3293.46	2022.04	.109221E-01	.689853E+01
(000)	(020)	9	7	8	5	3293.46	2022.04	.327661E-01	.689851E+01
(000)	(020)	6	-6	7	-6	3293.47	446.67	.187885E+02	.614005E+01
(010)	(110)	4	3	3	-1	3293.61	2129.82	.332967E-03	.115997E+00
(000)	(020)	2	0	3	0	3294.49	93.18	.287895E+02	.174363E+01
(000)	(100)	7	6	6	6	3295.69	1400.82	.154316E+01	.489592E+02
(000)	(100)	7	7	6	5	3295.69	1400.82	.463549E+01	.489591E+02
(000)	(100)	9	2	10	-8	3296.28	1638.69	.398675E-04	.395120E-02
(000)	(100)	9	0	8	0	3296.29	1479.75	.823649E+00	.380962E+02
(000)	(020)	8	-4	8	-2	3296.59	982.93	.139623E+01	.596412E+01
(000)	(020)	8	-8	7	-2	3296.55	744.03	.764370E-01	.103750E+00
(000)	(100)	10	2	10	-4	3299.95	1884.06	.146717E-02	.471034E+00

(000)	(020)	7	-7	7	-5	3300.05	586.22	.876612E+01	.186076E+01
(000)	(020)	9	4	9	2	3300.35	1820.70	.362285E-01	.858286E+01
(000)	(020)	3	1	3	3	3300.39	212.26	.304017E+02	.107404E+01
(000)	(020)	9	5	9	3	3300.47	1820.70	.108226E+00	.854628E+01
(000)	(001)	10	1	10	-6	3300.79	1883.60	.301946E-04	.322339E-02
(000)	(020)	5	5	6	1	3300.93	743.96	.164259E+00	.742619E-01
(000)	(001)	8	1	7	-2	3301.24	1259.29	.129428E+01	.692340E+01
(000)	(020)	3	4	6	2	3301.44	743.95	.551977E-01	.748499E-01
(000)	(020)	5	-2	6	-4	3301.51	416.40	.831053E+01	.234324E+01
(000)	(001)	9	6	10	-3	3302.22	2022.04	.624559E-05	.388301E-02
(000)	(100)	6	5	7	-5	3302.53	1048.63	.108978E-03	.212225E-03
(000)	(001)	6	5	5	2	3302.79	1048.63	.488247E+00	.950738E+00
(000)	(001)	6	6	5	3	3303.08	1048.63	.658591E+00	.384698E+01
(000)	(020)	8	0	7	2	3303.66	1133.84	.358990E+00	.315463E+01
(000)	(020)	7	1	8	-3	3303.99	933.15	.284307E+00	.318113E+00
(000)	(100)	7	0	7	-6	3304.39	929.72	.189355E-01	.625168E-01
(000)	(100)	8	3	9	-7	3304.57	1417.79	.206857E-03	.236362E-02
(000)	(100)	8	1	9	-9	3304.70	1259.29	.372265E-03	.198925E-02
(000)	(001)	6	3	6	-2	3304.90	1048.63	.882608E+00	.171756E+01
(000)	(001)	6	4	6	-3	3305.30	891.26	.968559E-03	.265852E-02
(000)	(100)	8	-2	7	-4	3305.60	1050.64	.116839E+01	.688566E+01
(000)	(001)	10	0	9	-3	3305.81	1729.71	.401900E-01	.614481E+01
(000)	(020)	3	0	3	2	3306.13	206.41	.102813E+02	.105769E+01
(000)	(100)	7	4	8	-6	3306.83	1221.05	.748577E-04	.998359E-03
(010)	(110)	5	2	5	-4	3307.20	2252.54	.515456E-04	.966305E-01
(000)	(020)	6	1	7	-1	3307.35	758.34	.832810E+00	.402609E+00
(000)	(100)	4	4	3	-2	3307.67	488.96	.447521E-01	.178356E-01
(000)	(020)	4	-1	4	1	3307.82	300.52	.343202E+02	.184708E+01
(000)	(020)	8	-6	8	-4	3308.39	882.98	.137429E+01	.362197E+01
(000)	(001)	8	8	9	-1	3309.47	1798.24	.341948E-02	.725394E+00
(000)	(020)	7	-6	8	-8	3309.49	586.46	.111067E+02	.706073E+01
(000)	(020)	7	-7	8	-7	3309.89	586.22	.334228E+02	.707347E+01
(000)	(100)	6	3	6	-3	3310.06	891.23	.393474E-01	.359435E-01
(000)	(020)	3	-1	4	-1	3310.39	173.37	.698481E+02	.204165E+01
(000)	(001)	10	-1	10	-8	3310.52	1724.02	.104530E-01	.517658E+00
(000)	(020)	8	5	8	3	3310.53	1598.74	.227494E+00	.617868E+01
(000)	(020)	8	6	8	4	3310.55	1598.74	.757615E-01	.617294E+01
(000)	(010)	9	-4	10	10	3310.78	1217.27	.373034E-07	.487988E-06
(000)	(020)	10	-9	9	-5	3310.78	1114.48	.497245E-01	.132454E+00
(000)	(001)	9	2	9	-5	3311.35	1638.69	.194509E-02	.191897E+00
(000)	(020)	7	-6	7	-4	3311.44	586.46	.293264E+01	.186323E+01
(000)	(001)	7	4	7	-3	3311.81	1221.05	.900544E-03	.119923E-01
(000)	(100)	7	5	6	3	3311.98	1221.06	.106332E+02	.472084E+02
(000)	(100)	7	4	6	4	3312.02	1221.05	.354306E+01	.472055E+02
(000)	(100)	8	2	7	0	3312.15	1260.01	.230667E+01	.370225E+02
(000)	(020)	5	-2	5	0	3312.40	416.40	.870545E+01	.244652E+01
(000)	(020)	8	-1	7	3	3313.06	1124.98	.655956E+00	.183626E+01
(000)	(100)	7	-3	6	-5	3314.35	782.45	.330638E+01	.179051E+01
(000)	(001)	8	3	8	-4	3314.72	1417.79	.313505E-01	.357125E+00
(000)	(020)	2	-1	3	1	3315.31	79.50	.593830E+02	.110503E+01
(000)	(100)	8	1	7	1	3316.63	1259.29	.692762E+01	.368856E+02
[illegible]	[illegible]	10	-2	10	-8	3316.84	1618.13	.676763E-02	.603994E+00
[illegible]	[illegible]	5	2	4	-2	3316.95	611.33	.338428E+00	.241847E+00
(000)	(020)	9	-9	8	-3	3317.02	920.12	.123515E+00	.129321E+00
(000)	(001)	6	2	5	-5	3317.22	759.38	.154378E+01	.224345E+01
(000)	(001)	10	-4	10	-9	3318.00	1538.38	.370496E-02	.225507E+00
(000)	(001)	9	9	9	4	3318.30	2238.53	.629869E-02	.366794E+01

(000)	(001)	9 8	9 5	3318.31	2238.53	.140418E-02	.245311E+01	
(000)	(001)	9 1	8 -2	3318.49	1481.97	.356197E+00	.551337E+01	
(000)	(020)	8 0	9 -4	3319.92	1133.84	.314370E-01	.274900E+00	
(000)	(001)	9 -2	9 -9	3320.57	1343.40	.716608E-02	.171122E+00	
(000)	(020)	6 -3	6 -1	3320.83	553.13	.159145E+02	.286447E+01	
(000)	(100)	8 8	9 0	3320.91	1798.24	.485203E-05	.102574E-02	
(000)	(020)	7 6	7 4	3321.54	1400.82	.107926E+00	.339306E+01	
(000)	(020)	7 7	7 5	3321.55	1400.82	.323733E+00	.339258E+01	
(000)	(100)	5 4	5 -2	3322.31	743.95	.711250E-02	.958419E-02	
(000)	(020)	9 -5	9 -3	3322.38	1202.07	.145451E+01	.587606E+01	
(000)	(020)	6 4	7 0	3322.63	891.26	.628006E-01	.171477E+00	
(000)	(100)	8 7	9 1	3323.45	1798.24	.146192E-04	.102940E-02	
(000)	(020)	6 3	7 1	3324.50	891.23	.193697E+00	.176173E+00	
(000)	(020)	4 -2	5 -2	3324.84	275.49	.175393E+02	.250157E+01	
(000)	(020)	8 -7	9 -9	3325.83	744.13	.177469E+02	.796985E+01	
(000)	(020)	8 -8	9 -8	3325.98	744.03	.592166E+01	.797377E+01	
(000)	(100)	7 2	8 -8	3326.63	1063.04	.560738E-03	.348486E-02	
(000)	(001)	8 -3	7 -6	3326.97	1007.08	.286753E+01	.454193E+01	
(000)	(100)	6 -1	5 -5	3327.09	649.73	.408873E+01	.116729E+01	
(000)	(020)	8 -8	8 -6	3327.54	744.03	.136775E+01	.184088E+01	
(000)	(020)	6 -1	7 -3	3329.25	649.73	.402118E+01	.114726E+01	
(000)	(100)	8 0	7 -2	3329.34	1133.84	.219816E+01	.191673E+02	
(000)	(020)	9 -7	8 -1	3329.67	1079.23	.180132E+00	.402914E+00	
(000)	(020)	9 -1	10 -5	3330.15	1362.21	.216856E-01	.188361E+00	
(000)	(001)	7 2	6 -1	3330.32	1063.04	.979805E+00	.608252E+01	
(000)	(001)	8 -1	7 -4	3330.56	1124.98	.109804E+01	.305766E+01	
(000)	(001)	8 2	7 -1	3330.57	1260.01	.272564E+00	.435052E+01	
(010)	(110)	4 3	4 -3	3330.65	2129.82	.873503E-04	.300920E-01	
(010)	(110)	5 0	4 -4	3330.84	2127.10	.127417E-02	.129971E+01	
(000)	(020)	8 -6	7 0	3330.91	882.98	.949241E-01	.248483E+00	
(000)	(001)	10 -2	9 -5	3331.91	1618.13	.806782E-01	.716776E+01	
(000)	(020)	8 8	7 6	3332.77	1798.24	.177618E-01	.374158E+01	
(000)	(020)	8 7	7 7	3332.78	1798.24	.532847E-01	.374151E+01	
(000)	(020)	8 -7	8 -5	3333.06	744.13	.411870E+01	.184563E+01	
(000)	(020)	6 -3	7 -5	3333.14	553.13	.190866E+02	.342274E+01	
(000)	(001)	5 5	5 -4	3333.53	743.96	.134856E+02	.603725E+01	
(000)	(020)	7 -4	7 -2	3333.74	709.84	.272743E+01	.311004E+01	
(000)	(010)	9 -9	10 -7	3336.24	920.12	.200865E-03	.209097E-03	
(000)	(020)	10 -8	9 -2	3336.93	1293.23	.341141E-01	.637313E+00	
(000)	(100)	6 6	5 4	3338.33	1048.63	.773864E+01	.447259E+02	
(000)	(100)	6 5	5 5	3338.34	1048.63	.232159E+02	.447256E+02	
(000)	(100)	6 1	6 -5	3338.46	758.34	.102852E+00	.492587E-01	
(000)	(100)	4 3	3 -1	3338.66	488.94	.338620E+00	.445629E-01	
(000)	(100)	7 3	6 1	3338.80	1063.23	.171094E+02	.353466E+02	
(000)	(100)	8 -2	8 -8	3339.03	1050.64	.135630E-01	.791304E-01	
(000)	(020)	5 -3	6 -3	3339.23	399.43	.367382E+02	.314712E+01	
(000)	(020)	10-10	9 -4	3339.30	1114.46	.230595E-01	.182683E+00	
(000)	(020)	7 1	6 3	3339.63	933.15	.162708E+01	.180113E+01	
(000)	(100)	7 2	6 2	3340.14	1063.04	.570140E+01	.352896E+02	
(000)	(020)	7 -5	6 1	3340.66	704.23	.345150E+00	.127443E+00	
(000)	(020)	9 -8	10-10	3341.56	920.16	.283377E+01	.883729E+01	
(000)	(020)	9 -9	10 -9	3341.61	920.12	.850371E+01	.883797E+01	
(000)	(100)	9 7	10 -1	3341.63	2022.04	.220058E-04	.467054E-02	
(000)	(100)	6 3	7 -7	3342.76	891.23	.174606E-03	.157941E-03	
(000)	(001)	9 0	9 -7	3342.76	1479.75	.495995E-03	.226223E-01	
(000)	(020)	7 0	6 4	3343.24	929.72	.375219E+00	.122441E+01	
(000)	(100)	10 -3	9 -3	3344.72	1584.04	.113422E+01	.284152E+02	
(000)	(001)	10 6	10 1	3344.78	2269.59	.170604E-05	.343573E-02	
(000)	(001)	7 3	6 0	3345.02	1063.23	.151365E+01	.312127E+01	
(000)	(001)	9 -3	8 -6	3345.17	1283.24	.490773E+00	.290606E+01	
(000)	(001)	10 3	10 2	3345.56	2269.59	.823587E-04	.552085E-01	
(000)	(020)	7 3	8 -1	3345.67	1063.23	.128929E+00	.265810E+00	
(000)	(020)	9 -7	9 -5	3346.03	1079.23	.151118E+01	.336363E+01	
(000)	(001)	9 7	9 2	3347.58	2022.04	.110019E-02	.224914E+00	
(000)	(001)	9 7	10 -2	3347.69	2022.04	.720495E-03	.147288E+00	
(000)	(001)	9 6	9 3	3347.79	2022.04	.367499E-03	.225372E+00	

(000)	(100)	9 6	10 0	3348.18	2022.04	.770523E-05	.472475E-02
(010)	(110)	6 -2	5 -4	3348.23	2211.51	.170943E-02	.260005E+01
(000)	(001)	7 6	8 -3	3348.70	1400.82	.433967E-01	.135328E+01
(000)	(020)	7 0	8 -2	3349.82	929.72	.190178E+00	.619369E+00
(000)	(001)	8 -4	7 -7	3350.97	982.95	.875822E+00	.368045E+01
(000)	(020)	8 -5	8 -3	3351.29	883.65	.364605E+01	.320588E+01
(000)	(100)	10 0	10 -6	3351.53	1729.71	.116002E-01	.174940E+01
(000)	(020)	7 2	8 0	3351.78	1063.04	.460577E-01	.284091E+00
(000)	(001)	8 8	8 3	3352.19	1798.24	.866030E-02	.181375E+01
(000)	(001)	8 7	8 4	3352.23	1798.24	.431568E-01	.301277E+01
(000)	(100)	3 4	6 -6	3352.36	743.93	.116718E-04	.155870E-04
(000)	(100)	9 -2	8 -2	3353.04	1343.40	.106137E+01	.250994E+02
(000)	(100)	3 3	5 -1	3353.04	743.96	.340547E-01	.151570E-01
(000)	(020)	9 -9	9 -7	3353.28	920.12	.175637E+01	.181905E+01
(000)	(020)	6 -4	7 -4	3355.01	542.89	.773989E+01	.394874E+01
(000)	(020)	9 -8	9 -6	3355.59	920.16	.583955E+00	.181970E+01
(000)	(020)	3 -2	4 0	3355.87	142.29	.106182E+02	.791320E+00
(000)	(001)	6 3	5 0	3357.80	891.23	.518445E+01	.466862E+01
(000)	(100)	7 -1	6 -3	3358.32	842.97	.116915E+02	.835209E+01
(000)	(020)	6 -4	5 2	3358.51	542.89	.897711E-01	.456338E-01
(000)	(020)	10 -6	10 -4	3359.86	1438.35	.141966E+00	.528226E+01
(000)	(100)	9 -1	9 -7	3360.15	1362.21	.998601E-01	.859643E+00
(000)	(100)	6 4	6 -2	3360.47	891.26	.306623E-01	.827806E-01
(000)	(001)	8 5	9 -4	3360.55	1598.74	.104538E-01	.279695E+00
(000)	(020)	9 -3	9 -1	3361.64	1283.24	.914458E+00	.538834E+01
(000)	(020)	7 -4	8 -6	3361.73	709.84	.401140E+01	.453605E+01
(000)	(100)	7 1	6 -1	3363.27	933.15	.192220E+02	.211286E+02
(000)	(001)	5 3	4 -4	3363.33	611.56	.712818E+01	.167641E+01
(000)	(001)	6 4	5 1	3363.54	891.26	.724393E+00	.195390E+01
(000)	(020)	8 -2	8 0	3364.18	1050.64	.731867E+00	.423801E+01
(000)	(100)	9 1	9 -5	3364.25	1481.97	.833434E-01	.127246E+01
(000)	(100)	8 -1	7 -1	3364.37	1124.98	.844503E+01	.232824E+02
(000)	(001)	8 -1	8 -8	3364.84	1124.98	.110356E+00	.304173E+00
(000)	(100)	6 4	5 2	3365.06	891.26	.124342E+02	.335235E+02
(000)	(100)	6 3	5 3	3365.33	891.23	.372957E+02	.335098E+02
(000)	(100)	7 7	8 -1	3365.52	1400.82	.170919E-03	.175844E-02
(000)	(100)	7 3	7 -3	3366.51	1063.23	.136231E+00	.279126E+00
(000)	(100)	5 2	5 -4	3366.66	611.33	.409221E-01	.288119E-01
(000)	(001)	9 4	10 -5	3368.22	1820.70	.338827E-02	.786538E+00
(000)	(100)	8 2	8 -4	3368.63	1260.01	.437399E-01	.690264E+00
(010)	(110)	4 1	3 -3	3368.76	2005.19	.343911E-02	.644421E+00
(000)	(001)	8 1	8 -6	3369.12	1259.29	.569125E-01	.298305E+00
(000)	(020)	8 2	9 -2	3370.15	1260.01	.215950E-01	.340638E+00
(000)	(001)	9 -1	8 -4	3370.30	1362.21	.111319E+01	.957114E+01
(000)	(001)	7 0	6 -3	3370.52	929.72	.930054E+00	.301039E+01
(000)	(020)	10 -4	10 -2	3370.64	1538.38	.109311E+00	.654947E+01
(000)	(100)	5 0	4 -4	3370.67	504.58	.190740E+01	.803984E+00
(000)	(020)	7 -1	7 1	3372.76	842.97	.432755E+01	.307824E+01
(000)	(020)	7 -5	8 -5	3372.96	704.23	.131980E+02	.482656E+01
(000)	(020)	9 -6	9 -4	3373.11	1080.65	.475038E+00	.316610E+01
(000)	(020)	6 2	5 4	3373.24	759.38	.501953E+00	.717333E+00
(000)	(020)	7 -2	8 -4	3373.81	817.56	.957444E+00	.180821E+01
(000)	(020)	6 1	5 5	3374.32	758.34	.121086E+01	.573752E+00
(000)	(100)	6 -2	5 -4	3375.13	602.86	.301335E+01	.203205E+01
(000)	(100)	7 6	8 0	3375.22	1400.82	.591234E-04	.182936E-02
(000)	(020)	3 -3	3 3	3375.90	136.75	.119727E+01	.267909E-01
(000)	(020)	2 2	3 2	3376.32	136.22	.332006E+02	.238875E+01
(000)	(001)	9 0	10 -9	3376.63	1479.75	.309214E-01	.139618E+01
(010)	(001)	7 -7	8 8	3376.87	2180.84	.239625E-06	.103986E-03
(000)	(020)	10-10	10 -8	3377.64	1114.46	.228601E+00	.179048E+01
(000)	(020)	2 1	3 3	3377.69	134.96	.100044E+03	.238393E+01
(000)	(020)	10 -9	10 -7	3378.47	1114.48	.685479E+00	.178937E+01
(000)	(001)	7 -2	6 -5	3379.00	817.56	.263228E+01	.496362E+01
(000)	(100)	7 0	6 0	3379.66	929.72	.695462E+01	.224498E+02
(000)	(001)	9 -3	9 -8	3380.74	1283.24	.627255E-03	.367514E-02
(000)	(020)	6 0	6 2	3383.19	662.20	.277776E+01	.248376E+01

(000)	(020)	5	-3	4	3	3383.41	399.43	.998074E-01	.843820E-02
(000)	(100)	10	5	10	3	3383.75	2269.59	.341065E-01	.226050E+02
(000)	(100)	10	6	10	4	3383.78	2269.59	.113665E-01	.226002E+02
(000)	(020)	10	-8	10	-6	3383.97	1293.23	.168238E+00	.309930E+01
(000)	(001)	5	4	4	1	3384.41	743.95	.305266E+01	.403802E+01
(000)	(100)	8	6	9	-2	3385.23	1598.74	.997944E-04	.795174E-02
(000)	(020)	8	1	9	-1	3385.59	1259.29	.784203E-01	.409038E+00
(000)	(001)	5	5	4	2	3385.97	743.96	.202632E+01	.893184E+00
(000)	(020)	4	-4	4	2	3387.15	222.03	.818895E+00	.886234E-01
(000)	(020)	8	-5	9	-7	3387.55	885.85	.641539E+01	.558053E+01
(000)	(020)	6	6	7	2	3388.87	1048.63	.120538E-01	.686378E-01
(000)	(100)	4	3	4	-3	3388.88	488.94	.741538E-01	.961413E-02
(000)	(001)	7	2	7	-5	3388.90	1063.04	.872661E-02	.532496E-01
(000)	(100)	9	6	9	4	3389.30	2022.04	.270147E-01	.163641E+02
(000)	(020)	9	6	9	4	3389.30	2022.04	.128820E-02	.780323E+00
(000)	(020)	6	5	7	3	3389.41	1048.63	.361419E-01	.685787E-01
(000)	(100)	9	9	9	7	3391.00	2238.53	.174115E-01	.992195E+01
(000)	(100)	9	8	9	6	3391.00	2238.53	.580383E-02	.992193E+01
(000)	(100)	7	-1	7	-7	3391.02	842.97	.559307E+00	.395700E+00
(000)	(100)	5	5	4	3	3391.18	743.96	.723348E+02	.318324E+02
(000)	(100)	5	4	4	4	3391.22	743.95	.241116E+02	.318307E+02
(000)	(020)	10	0	9	2	3391.34	1729.71	.777053E-02	.115811E+01
(000)	(020)	5	1	5	3	3392.10	509.40	.128377E+02	.183425E+01
(000)	(001)	9	5	9	0	3392.43	1820.70	.247111E-03	.189843E-01
(000)	(001)	10	4	10	-1	3392.55	2066.51	.327826E-02	.245539E+01
(000)	(020)	8	-6	9	-6	3392.77	882.98	.222373E+01	.571492E+01
(010)	(110)	6	0	6	-6	3392.83	2283.60	.357872E-03	.758974E+00
(000)	(100)	6	2	5	0	3393.08	759.38	.153238E+02	.217710E+02
(010)	(110)	6	0	5	-2	3393.61	2283.60	.542494E-02	.115025E+02
(000)	(001)	8	6	8	1	3393.81	1598.74	.686908E-02	.545952E+00
(000)	(100)	8	0	8	-6	3394.04	1133.84	.114936E+00	.983106E+00
(000)	(100)	9	-1	10	-9	3394.59	1362.21	.456684E-03	.389146E-02
(000)	(100)	8	8	8	6	3394.69	1798.24	.427673E-01	.884471E+01
(000)	(100)	8	7	8	5	3394.69	1798.24	.128303E+00	.884478E+01
(000)	(001)	8	5	8	2	3394.87	1598.74	.207201E-01	.548771E+00
(000)	(020)	6	-1	6	1	3395.16	649.73	.894267E+01	.250185E+01
(000)	(020)	9	1	10	-3	3395.49	1481.97	.253240E-01	.383087E+00
(010)	(110)	6	1	5	1	3395.87	2399.96	.185926E-01	.229419E+02
(000)	(001)	9	4	9	1	3395.91	1820.70	.575367E-03	.132474E+00
(000)	(020)	3	1	4	1	3396.08	212.26	.667119E+02	.229042E+01
(000)	(001)	9	2	10	-7	3396.11	1638.69	.892031E-05	.656108E-03
(010)	(020)	8	-7	8	7	3396.21	2337.94	.100243E-07	.918657E-05
(000)	(020)	7	-2	7	0	3396.33	817.56	.160511E+01	.301127E+01
(000)	(001)	7	7	7	2	3396.49	1400.82	.242695E+00	.248723E+01
(000)	(001)	7	6	7	3	3396.75	1400.82	.418405E-01	.128629E+01
(000)	(020)	5	0	5	2	3396.82	504.58	.443626E+01	.185552E+01
(000)	(020)	10	-1	9	3	3397.15	1724.02	.210931E-01	.101794E+01
(000)	(020)	10	-7	10	-5	3398.44	1293.92	.478357E+00	.293464E+01
(000)	(020)	4	2	4	4	3398.56	384.29	.444819E+01	.104454E+01
(000)	(100)	10	-5	9	-5	3398.97	1447.23	.276408E+01	.353648E+02
(000)	(001)	8	0	7	-3	3399.02	1133.84	.115408E+01	.985694E+01
(000)	(100)	6	1	5	1	3399.18	758.34	.467992E+02	.220131E+02
(000)	(020)	8	-1	9	-3	3399.47	1124.98	.340015E+00	.927634E+00
(010)	(110)	3	2	2	-2	3399.59	1907.56	.462312E-03	.161259E+00
(000)	(001)	7	7	8	-2	3399.64	1400.82	.144884E-04	.148344E-03
(000)	(020)	4	1	4	3	3399.88	382.96	.135003E+02	.104960E+01
(000)	(001)	8	-2	7	-5	3401.30	1050.64	.768277E+00	.440029E+01
(000)	(001)	6	3	6	-4	3401.55	891.23	.596985E-01	.530673E-01
(000)	(001)	10	3	10	0	3401.66	2066.48	.101922E-01	.253744E+01
(000)	(020)	8	-3	8	-1	3401.82	1007.03	.217139E+01	.336363E+01
(010)	(110)	4	4	4	-2	3401.85	2129.84	.107358E-03	.108642E+00
(000)	(001)	4	4	3	-3	3402.00	488.96	.651583E+01	.252483E+01
(000)	(020)	3	0	4	2	3402.77	206.41	.224057E+02	.223952E+01
(000)	(100)	9	5	10	-3	3403.61	1820.70	.274839E-03	.210455E-01
(000)	(100)	6	0	5	-2	3404.06	662.20	.113053E+02	.100468E+02
(000)	(001)	7	0	7	-7	3404.20	929.72	.493508E-01	.158158E+00

(000) (020)	10 -6	9 0	3404.36	1438.35	.179911E+00	.660659E+01
(000) (001)	8 1	9 -8	3404.69	1259.29	.140614E+00	.729324E+00
(010) (110)	5 3	4 1	3405.29	2252.71	.375336E-01	.227972E+02
(000) (001)	8 3	9 -6	3405.37	1417.79	.221279E-04	.245356E-03
(000) (020)	4 -3	5 -1	3405.63	224.85	.144051E+02	.523871E+00
(000) (100)	8 5	9 -1	3405.78	1598.74	.335586E-03	.885951E-02
(010) (110)	5 -1	4 -3	3406.27	2054.20	.126320E-01	.296572E+01
(000) (020)	7 5	8 1	3406.31	1221.06	.371790E-01	.160463E+00
(000) (001)	6 1	5 -2	3406.43	758.34	.544061E+01	.255368E+01
(000) (020)	5 -5	5 1	3406.80	325.33	.227149E+01	.133692E+00
(000) (001)	6 5	7 -4	3406.91	1048.63	.270919E-05	.511424E-05
(000) (001)	5 4	5 -3	3407.16	743.95	.484967E+00	.637226E+00
(000) (020)	7 4	8 2	3407.66	1221.05	.123446E-01	.159765E+00
(010) (110)	5 2	4 2	3408.07	2252.54	.123560E-01	.224777E+02
(010) (110)	5 3	5 -3	3408.30	2252.71	.867512E-03	.526445E+00
(000) (100)	4 1	3 -3	3408.50	382.96	.495183E+01	.384015E+00
(000) (001)	7 4	8 -5	3408.94	1221.05	.381154E-05	.493109E-04
(000) (100)	9 -4	8 -4	3411.37	1217.27	.217062E+01	.275578E+02
(000) (020)	9 -6	10 -8	3411.45	1080.65	.990654E+00	.653256E+01
(000) (020)	9 -4	9 -2	3412.89	1217.27	.274656E+00	.348544E+01
(000) (020)	4 0	5 0	3412.89	315.91	.134799E+02	.227095E+01
(000) (010)	10 -9	10 9	3413.57	1114.48	.333935E-08	.862737E-08
(000) (020)	9 -7	10 -7	3413.72	1079.23	.301775E+01	.658362E+01
(000) (001)	7 -3	6 -6	3413.76	782.45	.814467E+01	.428217E+01
(000) (100)	6 6	7 -2	3414.55	1048.63	.212046E-04	.119817E-03
(000) (001)	10 -2	10 -7	3416.67	1618.13	.132455E-01	.114759E+01
(000) (100)	7 1	7 -5	3418.01	933.15	.793072E+00	.858638E+00
(000) (020)	8 -3	9 -5	3418.18	1007.08	.175652E+01	.270794E+01
(000) (001)	7 1	6 -2	3420.33	933.15	.785310E+01	.849005E+01
(000) (100)	5 3	4 1	3420.49	611.56	.928510E+02	.214718E+02
(000) (100)	5 2	4 2	3422.13	611.33	.309951E+02	.214689E+02
(000) (100)	8 -3	7 -3	3422.66	1007.08	.140307E+02	.216021E+02
(000) (100)	10 -6	9 -4	3424.06	1438.35	.675335E+00	.246566E+02
(010) (110)	5 3	6 -5	3424.16	2252.71	.220243E-04	.133034E-01
(010) (020)	7 -5	8 7	3424.26	2309.89	.128045E-06	.101737E-03
(000) (020)	8 4	9 0	3424.90	1417.81	.755906E-02	.250037E+00
(010) (110)	4 4	3 2	3425.08	2129.84	.215989E-01	.217090E+02
(000) (020)	9 -5	8 1	3425.38	1202.07	.547067E+00	.214368E+01
(010) (110)	4 3	3 3	3425.50	2129.82	.646597E-01	.216584E+02
(010) (110)	5 1	4 -1	3426.65	2131.19	.358919E-01	.120975E+02
(000) (001)	7 2	8 -7	3426.83	1063.04	.312675E+00	.188639E+01
(000) (020)	9 1	8 3	3427.30	1481.97	.549599E-01	.823684E+00
(000) (020)	5 -1	6 -1	3427.32	446.64	.226407E+02	.236965E+01
(010) (110)	5 1	5 -5	3427.48	2131.19	.209585E-02	.706242E+00
(000) (001)	6 -1	5 -4	3427.76	649.73	.197362E+02	.546899E+01
(000) (020)	8 3	9 1	3428.33	1417.79	.230145E-01	.253477E+00
(000) (100)	10 -7	9 -7	3428.44	1293.92	.762280E+01	.463553E+02
(000) (020)	9 0	10 -2	3429.27	1479.75	.126533E-01	.562558E+00
(000) (020)	9 0	8 4	3429.54	1479.75	.177725E-01	.790093E+00
(010) (110)	4 4	5 -4	3429.90	2129.84	.422017E-05	.423572E-02
(000) (020)	10 -5	10 -3	3430.21	1447.23	.246377E+00	.312988E+01
(000) (100)	8 0	9 -8	3430.24	1133.84	.731052E-03	.635632E-02
(000) (100)	10 -8	9 -6	3430.59	1293.23	.250731E+01	.455621E+02
(000) (100)	7 3	8 -3	3430.90	1221.06	.117852E-03	.504999E-03
(000) (100)	5 -1	4 -3	3431.18	446.64	.240410E+02	.251339E+01
(000) (020)	4 -1	5 1	3431.61	300.52	.391929E+02	.208328E+01
(000) (100)	6 2	6 -4	3432.54	759.38	.374503E+00	.525950E+00
(000) (100)	6 0	6 -6	3434.11	662.20	.424809E+00	.374215E+00
(000) (100)	7 -2	6 -2	3434.17	817.56	.941719E+01	.174725E+02
(000) (001)	8 6	9 -3	3436.78	1598.74	.888170E-05	.697089E-03
(000) (020)	6 -6	6 0	3436.90	446.67	.422217E+00	.132222E+00
(010) (001)	8 -8	9 7	3436.99	2337.73	.324017E-07	.879363E-04
(000) (001)	6 1	6 -6	3437.87	758.34	.200422E+01	.932122E+00
(000) (001)	6 2	5 -1	3437.96	759.38	.446453E+01	.626007E+01
(000) (001)	5 2	4 -1	3438.65	611.33	.255261E+01	.175958E+01
(000) (100)	5 3	5 -3	3438.91	611.56	.883118E+00	.203127E+00

(000)	(001)	8 -2	8 -7	3439.23	1050.64	.816452E-01	.462465E+00
(000)	(100)	4 4	4 -2	3439.32	488.96	.104950E+00	.402257E-01
(000)	(001)	10 2	10 -3	3440.20	1884.06	.110892E-01	.341503E+01
(000)	(100)	3 2	2 -2	3440.47	285.50	.631606E+00	.912326E-01
(000)	(100)	9 4	10 -2	3440.61	1820.70	.118685E-03	.269712E-01
(000)	(100)	6 5	7 -1	3440.72	1048.63	.141528E-03	.264543E-03
(000)	(020)	6 -2	7 -2	3440.72	602.86	.396134E+01	.262040E+01
(000)	(100)	9 3	10 -3	3442.41	1638.83	.819021E-02	.259261E+00
(000)	(020)	2 -2	3 2	3442.46	70.08	.370050E+00	.190166E-01
(000)	(100)	5 1	4 -1	3442.52	509.40	.806830E+02	.113591E+02
(000)	(001)	6 3	7 -6	3442.82	891.23	.779718E+00	.684801E+00
(000)	(001)	9 3	9 -2	3443.41	1638.83	.114980E+00	.363861E+01
(000)	(100)	8 4	9 -4	3444.60	1417.81	.169468E-03	.557356E-02
(000)	(001)	8 4	8 -1	3445.31	1417.81	.135927E-01	.446954E+00
(000)	(100)	10 -4	9 -2	3445.59	1538.38	.221280E+00	.129697E+02
(000)	(100)	4 4	3 2	3446.81	488.96	.534300E+02	.204345E+02
(000)	(001)	7 3	7 0	3446.83	1221.06	.217330E+00	.926961E+00
(000)	(100)	4 3	3 3	3447.05	488.94	.160296E+03	.204318E+02
(000)	(100)	9 -6	8 -6	3447.23	1080.65	.567396E+01	.370268E+02
(000)	(100)	6 -1	5 -1	3447.27	649.73	.537927E+02	.148218E+02
(000)	(001)	6 6	6 1	3448.53	1048.63	.155779E+00	.871547E+00
(000)	(010)	9 -7	10 9	3448.82	1079.23	.397915E-07	.859295E-07
(000)	(100)	10 -9	9 -9	3449.51	1114.48	.218309E+02	.558134E+02
(000)	(100)	10-10	9 -8	3449.62	1114.46	.726899E+01	.557452E+02
(000)	(001)	7 -1	6 -4	3449.81	842.97	.901435E+01	.626882E+01
(000)	(100)	9 -3	8 -3	3449.89	1202.07	.490106E+01	.190679E+02
(000)	(001)	6 5	6 2	3449.95	1048.63	.104545E+01	.194891E+01
(010)	(110)	6 -1	5 -1	3451.16	2272.74	.215361E-01	.142078E+02
(000)	(100)	9 -7	8 -5	3451.31	1079.23	.167037E+02	.360455E+02
(000)	(001)	7 4	7 1	3451.44	1221.05	.737817E-01	.942779E+00
(010)	(110)	4 2	4 -4	3451.64	2006.30	.842322E-03	.464599E+00
(000)	(001)	5 4	6 -5	3452.61	743.95	.297809E+01	.386157E+01
(000)	(020)	9 3	10 -1	3453.33	1638.83	.264389E-02	.834275E-01
(010)	(110)	4 2	3 0	3453.93	2006.30	.217764E-01	.120032E+02
(000)	(100)	9 1	10 -7	3454.00	1481.97	.946909E-03	.140816E-01
(000)	(020)	6 -5	5 3	3454.25	447.25	.105897E+00	.110293E-01
(000)	(020)	8 -4	7 2	3454.55	982.95	.183335E+00	.747324E+00
(000)	(020)	7 -3	8 -3	3454.69	782.45	.585935E+01	.304413E+01
(000)	(020)	9 -2	10 -4	3454.81	1343.40	.605381E-01	.138945E+01
(000)	(001)	5 3	4 0	3455.10	611.56	.199606E+02	.456966E+01
(010)	(110)	3 0	4 0	3455.12	2127.10	.129491E-01	.127336E+02
(000)	(020)	5 -4	4 4	3456.22	326.63	.133033E-01	.232984E-02
(010)	(110)	4 0	3 -2	3456.41	1923.05	.963788E-02	.356145E+01
(000)	(100)	7 1	8 -7	3456.72	933.15	.692737E-02	.740861E-02
(000)	(100)	5 3	6 -3	3457.33	743.96	.307356E-02	.132671E-02
(000)	(001)	8 3	8 0	3457.36	1417.79	.324286E-01	.354165E+00
(000)	(020)	9 2	10 0	3458.24	1638.69	.366099E-02	.345842E+00
(000)	(020)	7 -6	6 2	3458.93	586.46	.633108E-01	.385088E-01
(000)	(001)	10 0	10 -5	3459.21	1729.71	.452604E-01	.661316E+01
(000)	(100)	10 3	10 1	3459.63	2066.48	.694755E-01	.170068E+02
(000)	(020)	9 -4	10 -6	3459.93	1217.27	.302360E+00	.378484E+01
(000)	(100)	10 4	10 2	3460.12	2066.51	.231492E-01	.170000E+02
(000)	(100)	9 4	9 2	3460.84	1620.70	.584081E-01	.131957E+02
(000)	(001)	9 -1	9 -6	3460.95	1362.21	.336193E+00	.280982E+01
(000)	(100)	9 5	9 3	3460.98	1620.70	.175230E+00	.131956E+02
(000)	(020)	8 2	7 4	3462.35	1260.01	.321080E-01	.492984E+00
(000)	(100)	10 -7	10 -9	3462.88	1293.92	.164377E+01	.989655E+01
(000)	(100)	5 0	4 0	3463.04	504.58	.322372E+02	.132258E+02
(000)	(100)	8 5	8 3	3463.07	1598.74	.349846E+00	.908320E+01
(000)	(020)	8 1	7 5	3463.08	1259.29	.955779E-01	.487377E+00
(000)	(100)	8 6	8 4	3463.10	1598.74	.116619E+00	.908339E+01
(000)	(100)	10 -8	10-10	3463.51	1293.23	.540315E+00	.972515E+01
(000)	(100)	8 2	9 -6	3463.81	1260.01	.988372E-03	.151721E-01
(010)	(110)	4 1	3 1	3464.55	2005.19	.656019E-01	.119526E+02
(000)	(020)	5 -4	6 -2	3464.61	326.63	.197303E+01	.344705E+00
(000)	(100)	6 4	7 -4	3464.98	891.26	.192824E-02	.504876E-02

(000)	(001)	5	2	5	-5	3465.27	611.33	.990448E-01	.677497E-01
(000)	(100)	8	-5	7	-5	3465.31	885.85	.338215E+02	.287600E+02
(000)	(100)	7	6	7	4	3466.01	1400.82	.155969E+00	.469910E+01
(000)	(100)	7	7	7	5	3466.02	1400.82	.467914E+00	.469915E+01
(010)	(110)	3	3	3	-3	3466.23	1907.72	.137347E-02	.156743E+00
(000)	(020)	5	-2	6	0	3467.17	416.40	.634699E+01	.170409E+01
(000)	(100)	7	3	8	-5	3467.31	1063.23	.530369E-02	.105549E-01
(000)	(100)	5	1	5	-5	3467.42	509.40	.268149E+01	.374808E+00
(000)	(001)	4	3	3	0	3467.85	488.94	.662032E+01	.838787E+00
(000)	(001)	9	2	9	-1	3469.02	1638.69	.437401E-01	.411914E+01
(000)	(100)	9	-8	8	-8	3469.51	920.16	.152689E+02	.458612E+02
(000)	(100)	9	-9	8	-7	3469.75	920.12	.458459E+02	.458883E+02
(000)	(020)	8	-4	9	-4	3470.81	982.95	.897519E+00	.364139E+01
(000)	(020)	3	-3	4	1	3471.59	136.75	.302209E+01	.706692E-01
(000)	(020)	8	-7	7	1	3471.60	744.13	.701871E+00	.301964E+00
(000)	(001)	9	3	10	-4	3472.07	1820.70	.174960E-04	.131332E-02
(000)	(001)	5	0	4	-3	3472.46	504.58	.139478E+02	.570676E+01
(000)	(100)	8	-6	7	-4	3473.26	882.98	.108382E+02	.272585E+02
(010)	(110)	8	-7	7	-7	3473.54	2337.94	.364187E-01	.326322E+02
(000)	(001)	6	-2	5	-3	3473.74	602.86	.796108E+01	.521615E+01
(010)	(110)	8	-8	7	-6	3473.93	2337.73	.120996E-01	.324883E+02
(000)	(001)	4	4	3	1	3474.22	488.96	.100726E+02	.362190E+01
(000)	(100)	6	2	7	-6	3474.73	759.33	.468188E-02	.649467E-02
(000)	(100)	4	2	3	0	3474.84	384.29	.513796E+02	.118002E+02
(000)	(100)	7	4	8	-2	3475.39	1221.05	.238275E-03	.302369E-02
(000)	(001)	9	1	9	-4	3477.32	1481.97	.203545E+00	.300665E+01
(010)	(110)	3	3	2	1	3477.98	1907.72	.101141E+00	.115034E+02
(000)	(020)	10	-2	10	0	3478.80	1618.13	.372681E-01	.317124E+01
(000)	(020)	7	-7	7	-1	3479.47	586.22	.486548E+00	.979526E-01
(000)	(100)	10	1	10	-1	3480.07	1883.60	.203151E+00	.207723E+02
(010)	(110)	3	2	2	2	3480.23	1907.56	.335977E-01	.114476E+02
(000)	(100)	8	-4	7	-2	3480.23	982.95	.302772E+01	.122507E+02
(000)	(100)	9	2	9	0	3480.46	1638.69	.187287E+00	.175794E+02
(000)	(100)	4	0	3	-2	3480.72	315.91	.198110E+02	.327253E+01
(000)	(100)	8	3	8	1	3481.32	1417.79	.123793E+01	.139692E+02
(000)	(100)	7	-4	6	-4	3482.08	709.84	.198283E+02	.216467E+02
(000)	(100)	8	4	8	2	3482.12	1417.81	.428477E+00	.139402E+02
(000)	(100)	4	1	3	1	3482.16	382.96	.161679E+03	.122730E+02
(000)	(100)	7	4	7	2	3482.68	1221.05	.783024E+00	.991570E+01
(000)	(100)	9	3	9	1	3482.86	1638.83	.358201E+00	.174646E+02
(000)	(100)	7	5	7	3	3482.88	1221.06	.234790E+01	.991067E+01
(000)	(100)	9	-3	8	-1	3483.10	1283.24	.132585E+01	.753997E+01
(000)	(100)	9	-6	9	-8	3483.43	1080.65	.138724E+01	.695872E+01
(000)	(020)	9	-1	9	1	3483.93	1362.21	.320999E+00	.266513E+01
(000)	(001)	6	6	7	-3	3484.23	1048.63	.159427E+00	.882835E+00
(000)	(100)	6	5	6	3	3484.41	1048.63	.288667E+01	.532807E+01
(000)	(100)	6	6	6	4	3484.44	1048.63	.962146E+00	.532760E+01
(000)	(100)	9	-7	9	-9	3484.76	1079.23	.410507E+01	.877345E+01
(000)	(100)	5	3	6	-5	3485.24	611.56	.177131E-01	.402007E-02
(000)	(001)	10	2	9	3	3485.77	1884.06	.984428E+00	.299202E+03
(000)	(001)	4	3	4	-4	3485.95	488.94	.393021E+02	.495368E+01
(000)	(001)	10	1	9	2	3486.02	1883.60	.315031E+01	.318437E+03
(000)	(001)	10	1	10	-2	3486.13	1883.60	.492913E-01	.498227E+01
(000)	(100)	10	2	10	0	3486.16	1884.06	.672259E-01	.204300E+02
(000)	(001)	10	0	9	1	3486.90	1729.71	.261264E+01	.378711E+03
(000)	(100)	10	-5	10	-7	3488.72	1447.25	.140065E+01	.174594E+02
(000)	(001)	6	0	5	-3	3488.91	662.20	.818531E+01	.709738E+01
(000)	(100)	4	4	5	-4	3489.03	488.96	.364490E-02	.137714E-02
(010)	(110)	7	-4	6	-4	3489.16	2319.03	.809061E-02	.197742E+02
(000)	(001)	10	-1	9	0	3489.16	1724.02	.749475E+01	.352156E+03
(000)	(001)	8	2	8	-3	3489.51	1260.91	.283466E+00	.431644E+01
(000)	(020)	10	5	10	3	3489.53	2269.59	.289179E-02	.185531E+01
(000)	(020)	10	6	10	4	3489.54	2269.59	.964497E-03	.185960E+01
(000)	(001)	10	-2	9	-1	3489.58	1618.13	.492494E+01	.417780E+03
(000)	(100)	8	-7	7	-7	3489.86	744.13	.860336E+02	.368203E+02
(000)	(100)	8	-8	7	-6	3490.08	744.03	.288375E+02	.370308E+02

(000)	(020)	9 -5	10 -5	3490.29	1202.07	.113810E+01	.437660E+01
(000)	(001)	10 4	9 5	3490.33	2066.51	.344953E+00	.251129E+03
(000)	(020)	7 -3	6 3	3490.33	782.45	.437767E+00	.225112E+00
(000)	(001)	10 3	9 4	3490.35	2066.48	.946969E+00	.229767E+03
(000)	(100)	4 2	4 -4	3490.96	384.29	.112821E+01	.257918E+00
(000)	(001)	7 -1	7 -6	3491.08	842.97	.115209E-01	.791724E-02
(010)	(110)	7 -4	7 -6	3492.63	2319.03	.282178E-02	.688984E+01
(000)	(001)	9 -1	10-10	3494.16	1362.21	.499220E-01	.413270E+00
(000)	(020)	9 -8	8 0	3494.66	920.16	.322340E-01	.961198E-01
(000)	(020)	8 0	8 2	3494.87	1133.84	.272498E+00	.226357E+01
(010)	(110)	7 -6	6 -6	3495.12	2131.31	.203143E-01	.256093E+02
(000)	(020)	9 9	8 7	3495.62	2238.53	.188245E-02	.104061E+01
(000)	(020)	9 8	8 8	3495.63	2238.53	.627489E-03	.104061E+01
(010)	(110)	7 -7	6 -5	3496.03	2180.84	.604513E-01	.253389E+02
(000)	(001)	8 0	8 -5	3496.15	1133.84	.221061E+00	.183562E+01
(000)	(020)	7 3	6 5	3496.49	1063.23	.994761E-01	.196242E+00
(000)	(100)	10 -6	10 -8	3496.62	1438.35	.446993E+00	.159812E+02
(000)	(020)	7 2	6 6	3496.68	1063.04	.331066E-01	.195744E+00
(000)	(100)	7 -5	6 -3	3497.06	704.23	.545047E+02	.192253E+02
(000)	(020)	3 3	4 3	3497.14	285.70	.668164E+02	.316691E+01
(000)	(001)	10 -4	9 -3	3497.14	1538.38	.787455E+01	.454743E+03
(000)	(100)	10 -3	10 -5	3497.20	1584.04	.133100E+00	.318910E+01
(000)	(001)	7 3	7 -2	3497.30	1063.23	.228508E+00	.450684E+00
(000)	(100)	6 -3	5 -3	3497.34	553.13	.930192E+02	.158977E+02
(000)	(020)	3 2	4 4	3497.35	285.50	.229136E+02	.317068E+01
(010)	(110)	3 1	2 -1	3498.01	1619.41	.567348E-01	.420110E+01
(000)	(001)	10 -3	9 -2	3498.20	1584.04	.174075E+02	.416969E+03
(000)	(020)	9 -2	9 0	3499.31	1363.40	.199870E-02	.452901E-01
(010)	(110)	6 -3	5 -3	3499.34	2161.67	.383317E-01	.146423E+02
(000)	(100)	10 -1	10 -3	3500.29	1724.02	.439507E+00	.205655E+02
(000)	(100)	10 -2	9 0	3501.02	1618.13	.580525E-01	.490848E+01
(010)	(110)	7 -5	7 -7	3501.59	2309.69	.833130E-02	.647339E+01
(000)	(020)	5 -3	5 3	3502.07	399.43	.744893E+00	.608432E-01
(000)	(001)	6 4	6 -1	3502.10	891.26	.509896E+00	.132092E+01
(000)	(020)	8 -1	8 1	3502.39	1124.98	.248816E+00	.658677E+00
(000)	(020)	6 -4	6 2	3502.50	542.89	.287663E+00	.140218E+00
(000)	(100)	9 7	9 5	3502.61	2022.04	.399439E-02	.709439E+00
(000)	(020)	9 7	9 5	3502.61	2022.04	.837505E-01	.168635E+02
(000)	(100)	3 3	2 1	3503.02	285.70	.243776E+03	.115389E+02
(000)	(100)	8 -5	8 -7	3504.02	885.85	.974063E+01	.819140E+01
(000)	(100)	9 0	9 -2	3504.22	1479.73	.426672E+00	.163028E+02
(000)	(100)	3 2	2 2	3504.51	285.50	.818282E+02	.116037E+02
(000)	(020)	7 1	7 3	3504.89	933.15	.173388E+01	.182884E+01
(000)	(001)	5 5	5 0	3505.07	743.96	.406366E+01	.173019E+01
(000)	(001)	10 6	9 7	3505.13	2269.59	.833598E-01	.160007E+03
(000)	(001)	10 5	9 6	3505.13	2269.59	.273024E+00	.174688E+03
(000)	(100)	3 3	3 -3	3505.76	285.70	.181791E+01	.859818E-01
(000)	(100)	9 -4	9 -6	3506.55	1217.27	.126393E+01	.156111E+02
(000)	(100)	8 -6	8 -8	3506.69	882.98	.314859E+01	.782891E+01
(000)	(020)	4 -4	5 0	3506.77	222.03	.126171E+01	.131888E+00
(000)	(100)	8 1	8 -1	3507.05	1259.29	.310349E+01	.156271E+02
(010)	(110)	7 -5	6 -3	3507.11	2309.69	.206676E-01	.160334E+02
(010)	(110)	5 -2	4 -2	3507.26	2024.43	.181710E-01	.107595E+02
(000)	(020)	4 -2	4 4	3507.36	275.49	.979353E-01	.132262E-01
(000)	(100)	5 4	6 -2	3507.73	743.95	.225660E-02	.288092E-02
(000)	(020)	7 0	7 2	3507.78	929.72	.307998E+00	.957915E+00
(010)	(100)	8 -8	9 8	3508.08	2337.73	.381440E-10	.101423E-06
(000)	(020)	10 -3	10 -1	3508.12	1584.04	.909401E+00	.217217E+02
(000)	(020)	7 7	8 3	3508.45	1400.82	.939515E-02	.932122E-01
(000)	(020)	7 6	8 4	3508.47	1400.82	.312839E-02	.931127E-01
(000)	(100)	7 2	7 0	3509.12	1063.04	.212727E+01	.125330E+02
(000)	(100)	7 -6	6 -6	3509.85	586.46	.487774E+02	.292385E+02
(000)	(100)	7 -7	6 -5	3510.58	586.22	.145967E+03	.291259E+02
(000)	(100)	6 3	6 1	3510.80	891.23	.104355E+02	.898772E+01
(000)	(001)	5 4	5 1	3510.85	743.95	.303219E+00	.393025E+00
(000)	(100)	3 3	9 -3	3510.97	1417.79	.129675E-02	.139460E-01

(000)	(001)	7 5	8 -4	3511.45	1221.06	.433615E-01	.181543E+00
(000)	(020)	7 -5	7 1	3511.50	704.23	.344005E+00	.120841E+00
(000)	(001)	9 3	8 4	3511.64	1638.63	.730786E+01	.226769E+03
(000)	(001)	9 1	8 2	3511.64	1481.97	.213934E+02	.312995E+03
(000)	(001)	10 -6	9 -5	3511.69	1438.35	.121267E+02	.431699E+03
(000)	(001)	9 2	8 3	3511.74	1638.69	.267665E+01	.249002E+03
(000)	(100)	3 -2	4 -2	3511.88	416.40	.440197E+02	.116683E+02
(000)	(100)	6 4	6 2	3511.92	891.26	.346930E+01	.896235E+01
(000)	(001)	10 -3	9 -4	3512.04	1447.25	.334959E+02	.414763E+03
(000)	(100)	5 4	5 2	3512.37	743.95	.383853E+01	.489258E+01
(000)	(020)	6 -3	7 -1	3512.56	553.13	.757514E+01	.128904E+01
(000)	(001)	4 1	3 -2	3512.59	382.96	.727307E+02	.547314E+01
(000)	(100)	5 5	5 3	3512.60	743.96	.115086E+02	.480955E+01
(000)	(100)	7 3	7 1	3512.69	1063.23	.632666E+01	.124234E+02
(000)	(001)	9 0	8 1	3512.80	1479.75	.672592E+01	.291920E+03
(000)	(001)	9 -1	8 0	3512.94	1362.21	.427095E+02	.351673E+03
(000)	(020)	6 2	6 4	3513.58	759.33	.967072E+00	.132682E+01
(000)	(100)	7 -3	6 -1	3513.97	782.45	.135930E+02	.694289E+01
(000)	(020)	6 1	6 3	3514.44	758.34	.208674E+01	.949359E+00
(010)	(110)	6 -3	6 -5	3515.20	2161.67	.163130E-01	.620331E+01
(010)	(110)	4 -1	3 -1	3515.24	1908.19	.716329E-01	.808135E+01
(010)	(110)	6 -5	5 -5	3515.76	2042.91	.907006E-01	.195133E+02
(000)	(100)	8 2	8 0	3516.03	1260.01	.101359E+01	.153250E+02
(000)	(001)	6 3	6 0	3517.02	891.23	.168549E+01	.144908E+01
(000)	(020)	4 2	5 2	3517.11	384.29	.133109E+02	.302036E+01
(000)	(001)	9 -3	8 -2	3517.22	1283.24	.721317E+02	.406227E+03
(000)	(020)	8 8	8 6	3517.26	1798.24	.114683E-02	.228911E+00
(000)	(020)	8 7	8 5	3517.26	1798.24	.344047E-02	.228910E+00
(010)	(110)	6 -6	5 -4	3517.63	2041.91	.296293E-01	.190206E+02
(000)	(001)	9 5	8 6	3518.26	1820.70	.236539E+01	.175262E+03
(000)	(001)	9 4	8 5	3518.26	1820.70	.716859E+00	.159756E+03
(000)	(020)	4 1	5 3	3518.54	382.96	.403875E+02	.303410E+01
(000)	(001)	5 1	4 -2	3518.99	509.40	.408377E+02	.562446E+01
(000)	(100)	9 -2	9 -4	3519.01	1343.40	.997977E+00	.224873E+02
(000)	(001)	9 -2	8 -1	3519.72	1343.40	.160095E+02	.360668E+03
(000)	(100)	9 -5	9 -7	3520.29	1202.07	.380603E+01	.145115E+02
(000)	(020)	5 3	5 5	3521.10	611.56	.340980E+01	.765987E+00
(000)	(020)	5 2	5 4	3521.29	611.33	.996016E+00	.671614E+00
(000)	(100)	8 -2	7 0	3521.52	1050.64	.759333E+00	.420060E+01
(000)	(020)	8 6	9 2	3522.31	1598.74	.256466E-02	.204060E+00
(000)	(001)	7 1	7 -4	3522.39	933.15	.324289E+01	.340351E+01
(000)	(020)	8 5	9 3	3522.43	1598.74	.795450E-02	.203046E+00
(000)	(100)	9 1	9 -1	3522.55	1431.97	.121688E+01	.177442E+02
(000)	(100)	3 1	2 -1	3522.65	212.25	.126014E+03	.417097E+01
(000)	(100)	6 -4	5 -2	3523.37	542.89	.251083E+02	.121662E+02
(000)	(100)	3 -3	2 -5	3523.46	1007.03	.942089E+01	.140897E+02
(000)	(100)	7 -4	7 -6	3524.27	709.84	.694372E+01	.748975E+01
(010)	(110)	3 0	2 0	3525.75	1813.87	.294382E-01	.681799E+01
(000)	(100)	3 -1	3 -3	3526.98	1124.98	.728209E+01	.191646E+02
(000)	(100)	4 -1	3 -1	3527.03	380.52	.174073E+03	.878601E+01
(000)	(100)	10 2	9 4	3527.28	1884.06	.731267E-02	.219642E+01
(000)	(020)	10 2	9 4	3527.28	1884.06	.117191E-03	.351994E-01
(000)	(001)	7 2	7 -1	3527.54	1063.04	.271680E+00	.159227E+01
(010)	(110)	4 3	4 1	3528.18	2129.82	.135487E-01	.440456E+01
(000)	(001)	5 -1	4 -4	3528.25	446.64	.729168E+02	.741341E+01
(000)	(001)	10 -7	9 -6	3529.24	1293.92	.786362E+02	.464540E+03
(000)	(001)	10 -6	9 -7	3529.28	1293.23	.263542E+02	.465511E+03
(000)	(100)	6 -5	5 -5	3529.57	447.25	.219477E+03	.223711E+02
(000)	(100)	7 -5	7 -7	3529.76	704.23	.215374E+02	.752643E+01
(000)	(020)	6 -2	5 4	3529.76	602.86	.695232E-01	.448291E-01
(010)	(110)	6 -4	6 -6	3530.12	2146.31	.539867E-02	.569207E+01
(000)	(001)	8 0	9 -9	3530.13	1133.84	.110852E+00	.911618E+00
(000)	(020)	10 -9	9 -1	3530.40	1114.48	.892734E-03	.223009E-02
(000)	(001)	9 -5	8 -4	3530.44	1202.07	.102186E+03	.388489E+03
(010)	(110)	4 4	4 2	3530.77	2129.84	.444991E-02	.433671E+01
(010)	(110)	6 -4	5 -2	3530.90	2146.31	.930518E-02	.981781E+01

(010)	(110)	4 3	5 -3	3531.19	2129.82	.676758E-04	.219901E-01
(000)	(100)	6 -6	5 -4	3531.32	446.67	.725123E+02	.221008E+02
(000)	(100)	10 0	10 -2	3531.60	1729.71	.138442E+00	.196137E+02
(000)	(020)	6 -3	7 -3	3531.73	447.25	.235540E+01	.239937E+00
(010)	(110)	2 2	1 0	3531.77	1743.49	.299445E-01	.457813E+01
(000)	(020)	8 -6	8 0	3531.84	882.98	.239358E+00	.590921E+00
(000)	(001)	8 4	9 -5	3532.23	1417.81	.146758E-01	.470694E+00
(000)	(001)	9 -4	8 -3	3532.25	1217.27	.300691E+02	.368688E+03
(000)	(100)	7 0	7 -2	3533.46	929.72	.509933E+01	.157443E+02
(010)	(110)	3 2	3 0	3534.06	2252.54	.447138E-02	.784424E+01
(000)	(001)	6 0	6 -5	3534.36	662.20	.122733E+01	.105049E+01
(010)	(110)	5 -4	4 -4	3535.00	1922.94	.395997E-01	.143003E+02
(010)	(110)	5 -2	5 -4	3535.31	2024.43	.939797E-02	.552059E+01
(000)	(020)	5 1	6 1	3535.49	509.40	.211137E+02	.289436E+01
(000)	(020)	8 -8	8 -2	3535.51	744.03	.486091E-01	.615752E-01
(000)	(001)	9 7	8 8	3535.67	2022.04	.391671E+00	.758107E+02
(000)	(001)	9 6	8 7	3535.67	2022.04	.157959E+00	.917222E+02
(000)	(100)	9 -1	8 1	3536.90	1362.21	.365615E+00	.299010E+01
(000)	(001)	8 2	7 3	3537.56	1260.01	.162900E+02	.244797E+03
(000)	(100)	10 -3	9 1	3537.65	1584.04	.137457E+00	.325584E+01
(000)	(020)	9 5	10 1	3537.91	1820.70	.407100E-02	.299907E+00
(000)	(001)	8 1	7 2	3538.02	1259.29	.443502E+02	.221363E+03
(000)	(100)	6 1	6 -1	3538.08	753.34	.269278E+02	.121689E+02
(000)	(020)	9 4	10 2	3538.23	1820.70	.133226E-02	.294405E+00
(000)	(100)	6 3	7 -3	3538.51	891.23	.193938E-01	.165723E-01
(000)	(001)	8 0	7 1	3538.65	1133.84	.350346E+02	.287422E+03
(000)	(100)	7 -2	7 -4	3538.68	817.56	.698033E+01	.125687E+02
(000)	(001)	8 4	7 5	3538.70	1417.81	.493914E+01	.156122E+03
(000)	(001)	8 3	7 4	3538.71	1417.79	.163447E+02	.174403E+03
(010)	(110)	6 -1	7 -7	3538.74	2272.74	.218978E-03	.140889E+00
(000)	(100)	9 -4	10-10	3539.47	1217.27	.423206E-02	.520297E-01
(010)	(110)	3 -3	4 -3	3539.64	1920.83	.113019E+00	.134499E+02
(010)	(110)	6 1	6 -1	3539.75	2399.96	.898270E-02	.106335E+02
(000)	(001)	8 -2	7 -1	3539.94	1050.64	.640840E+02	.352665E+03
(010)	(110)	2 1	1 1	3540.36	1742.31	.102952E+00	.520440E+01
(000)	(020)	5 0	6 2	3540.81	504.58	.728918E+01	.292481E+01
(000)	(001)	6 2	6 -3	3540.86	759.33	.644162E+00	.876981E+00
(000)	(100)	5 2	5 0	3541.13	611.33	.124770E+02	.835179E+01
(000)	(001)	8 1	8 -2	3541.17	1259.29	.143149E+01	.713856E+01
(000)	(001)	4 2	3 -1	3542.78	384.29	.136597E+02	.307704E+01
(000)	(100)	10 -4	10 -6	3542.86	1538.33	.361469E+00	.206049E+02
(000)	(001)	8 -1	7 0	3542.91	1124.98	.114951E+03	.300914E+03
(000)	(100)	4 3	4 1	3543.11	488.94	.345155E+02	.428019E+01
(010)	(110)	5 3	5 1	3543.12	2252.71	.128342E-01	.749199E+01
(000)	(100)	6 -3	6 -5	3543.67	553.13	.403667E+02	.689877E+01
(000)	(100)	3 0	2 0	3544.11	206.41	.716107E+02	.687225E+01
(010)	(110)	6 -1	6 -3	3544.26	2272.74	.150728E-01	.968263E+01
(000)	(100)	4 4	4 2	3544.50	488.96	.114884E+02	.427269E+01
(000)	(100)	8 -4	8 -6	3544.93	982.95	.338593E+01	.134501E+02
(000)	(100)	9 2	10 -4	3545.32	1638.69	.453919E-03	.420113E-01
(000)	(001)	9 3	10 -6	3545.56	1638.83	.499354E-02	.153471E+00
(000)	(100)	5 3	5 1	3545.96	611.56	.369101E+02	.823344E+01
(010)	(110)	7 -3	6 -1	3546.70	2393.01	.470327E-02	.537458E+01
(000)	(001)	8 6	7 7	3547.23	1598.74	.121596E+01	.924645E+02
(000)	(001)	8 5	7 6	3547.23	1598.74	.297065E+01	.752982E+02
(000)	(001)	3 2	2 -1	3548.06	283.50	.400679E+02	.561211E+01
(000)	(020)	9 -6	8 2	3548.06	1080.65	.682884E-03	.432968E-02
(000)	(100)	5 -4	4 -4	3548.62	326.63	.962085E+02	.164105E+02
(000)	(020)	5 -5	6 -1	3548.63	325.33	.300937E+01	.170041E+00
(000)	(001)	5 5	6 -4	3548.82	743.96	.435972E-02	.185336E-02
(000)	(001)	9 -7	8 -6	3549.18	1079.23	.198750E+03	.417064E+03
(010)	(110)	5 0	6 -6	3549.33	2127.10	.117543E-03	.112518E+00
(000)	(001)	9 -6	8 -5	3549.34	1080.65	.654802E+02	.415014E+03
(000)	(001)	10 -9	9 -8	3549.50	1114.48	.166776E+03	.414373E+03
(000)	(001)	10-10	9 -9	3549.51	1114.46	.565309E+02	.421330E+03
(000)	(100)	6 -2	5 0	3549.60	602.86	.548410E+01	.351642E+01

AD-A078 394 SCIENCE APPLICATIONS INC LA JOLLA CA F/G 4/1
H2O-N2 TRANSITION RATES AND LINE SHIFTS OF WATER VAPOR.(U)
JUL 79 J NAGEL , D ROGOVIN F29601-77-C-0039
AFWL-TR-79-3 NL

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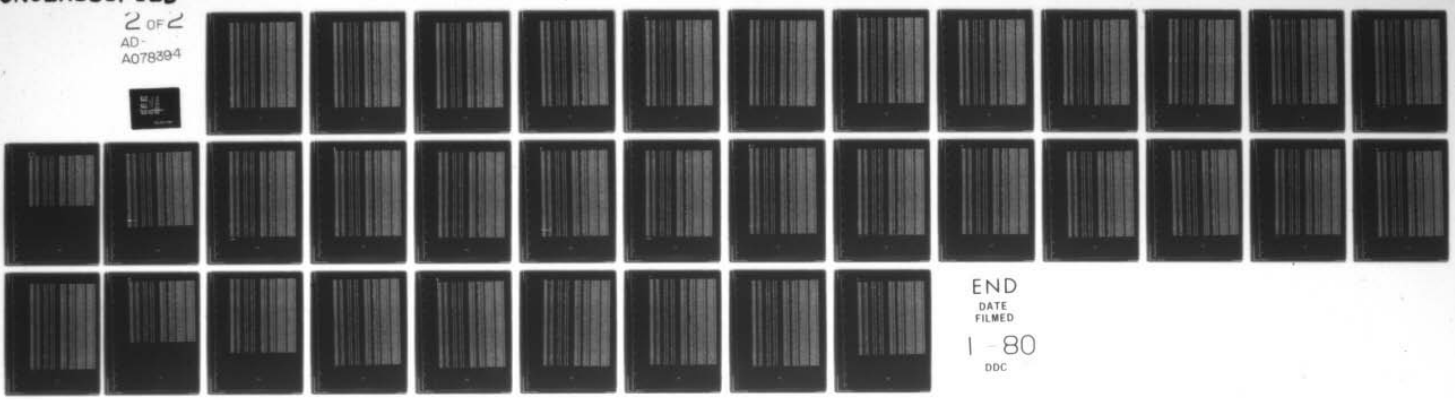

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(000)	(001)	8 -4	7 -3	3549.91	982.95	.882195E+02	.349947E+03
(000)	(100)	6 2	6 0	3550.00	759.38	.872676E+01	.118503E+02
(010)	(110)	5 0	5 -2	3550.11	2127.10	.843729E-02	.807494E+01
(010)	(110)	3 2	4 -4	3550.38	1907.56	.823724E-04	.275119E-01
(000)	(100)	6 -1	6 -3	3551.56	649.73	.406482E+02	.108711E+02
(000)	(020)	6 0	7 0	3551.69	662.20	.326232E+01	.277865E+01
(000)	(100)	10 0	9 2	3551.83	1729.71	.153918E-01	.219031E+01
(000)	(020)	8 -5	7 3	3552.19	885.85	.852758E-02	.707404E-02
(000)	(020)	10 -7	9 1	3552.22	1293.92	.677572E-03	.397683E-02
(010)	(110)	4 -1	4 -3	3552.28	1903.19	.426187E-01	.475662E+01
(010)	(110)	4 -3	3 -3	3552.28	1821.67	.135011E+00	.995183E+01
(000)	(100)	5 -3	4 -1	3552.49	399.43	.820776E+02	.660897E+01
(000)	(100)	5 -5	4 -3	3552.49	325.33	.281106E+03	.158664E+02
(000)	(001)	9 1	10 -8	3552.57	1481.97	.385053E-02	.556731E-01
(010)	(110)	4 1	4 -1	3552.65	2003.19	.339991E-01	.604098E+01
(010)	(110)	3 2	3 0	3552.67	1907.56	.103447E-01	.345284E+01
(010)	(020)	7 -6	8 8	3552.85	2181.31	.813459E-08	.100883E-04
(000)	(001)	5 3	5 -2	3553.21	611.56	.699708E+01	.155764E+01
(000)	(100)	6 -4	6 -6	3553.42	542.89	.140396E+02	.674536E+01
(000)	(001)	8 -3	7 -2	3553.45	1007.08	.211541E+03	.313708E+03
(010)	(110)	4 1	5 -5	3553.48	2005.19	.407843E-03	.724490E-01
(000)	(100)	9 3	8 5	3554.10	1638.83	.374638E-01	.114865E+01
(000)	(100)	9 2	8 6	3554.24	1638.69	.124861E-01	.114767E+01
(000)	(100)	9 -5	10 -9	3554.73	1202.07	.913802E-02	.344846E-01
(010)	(110)	5 2	6 -4	3555.65	2252.54	.515307E-04	.898524E-01
(000)	(001)	9 0	9 -3	3555.77	1479.75	.253953E+00	.109747E+02
(000)	(100)	7 1	7 -1	3556.20	933.15	.148365E+02	.154233E+02
(000)	(100)	9 -2	8 2	3556.53	1343.40	.110012E+00	.245274E+01
(000)	(001)	7 1	8 -8	3556.67	933.15	.489151E+00	.499076E+00
(000)	(100)	8 -3	9 -9	3556.91	1007.08	.521384E-01	.772441E-01
(010)	(110)	5 -3	4 -1	3556.99	2000.85	.299606E-01	.520743E+01
(000)	(100)	2 2	1 0	3557.04	136.22	.706059E+02	.482193E+01
(000)	(100)	10 -5	9 -1	3557.27	1447.25	.142024E+00	.173625E+01
(000)	(100)	10 -1	9 3	3557.66	1724.02	.453256E-01	.208871E+01
(010)	(110)	5 -3	5 -5	3557.82	2000.85	.295388E-01	.513292E+01
(000)	(020)	4 -3	4 3	3557.99	224.85	.131230E+00	.456810E-02
(000)	(100)	9 -4	8 0	3558.77	1217.27	.170471E+00	.207463E+01
(000)	(100)	7 -1	6 1	3559.06	842.97	.329425E+01	.222059E+01
(000)	(001)	6 4	7 -5	3560.68	691.26	.395494E-02	.100770E-01
(000)	(001)	4 4	4 -4	3561.02	488.96	.842009E+00	.311701E+00
(000)	(001)	9 8	10 3	3561.34	2238.53	.736956E-03	.119960E+01
(000)	(001)	9 9	10 4	3561.38	2238.53	.414654E-04	.224986E-01
(000)	(100)	4 3	5 -3	3561.53	488.94	.802313E-01	.990031E-02
(000)	(100)	5 -2	5 -4	3561.59	416.40	.233112E+02	.609287E+01
(000)	(100)	5 0	5 -2	3561.68	504.58	.222201E+02	.886366E+01
(010)	(110)	4 -4	3 -2	3561.99	1817.47	.397810E-01	.859804E+01
(010)	(110)	3 3	3 1	3562.02	1907.72	.306357E-01	.340474E+01
(000)	(001)	10 -7	10-10	3562.45	1293.92	.312500E+01	.182887E+02
(000)	(001)	8 2	9 -7	3562.50	1260.01	.301327E-02	.449649E-01
(000)	(100)	8 0	8 -2	3562.60	1133.84	.233780E+01	.192133E+02
(000)	(100)	9 -3	9 -5	3562.98	1283.24	.360339E+01	.200327E+02
(000)	(100)	10 4	9 6	3563.02	2066.51	.157277E-02	.112163E+01
(000)	(100)	10 3	9 7	3563.05	2066.48	.471837E-02	.112148E+01
(000)	(020)	7 -4	6 4	3563.12	709.84	.978896E-02	.104436E-01
(000)	(001)	10 -8	10 -9	3563.15	1293.23	.141606E+01	.247749E+02
(000)	(100)	2 1	1 1	3563.51	134.96	.250094E+03	.564871E+01
(000)	(001)	3 3	2 0	3563.73	285.70	.237677E+02	.110586E+01
(000)	(001)	7 3	6 4	3564.16	1063.23	.689108E+02	.172069E+03
(000)	(001)	7 2	6 3	3564.30	1063.04	.267193E+02	.154982E+03
(000)	(001)	7 3	8 -6	3565.18	1063.23	.136512E-01	.264116E-01
(000)	(001)	7 -1	6 0	3565.28	842.97	.436198E+03	.293519E+03
(000)	(001)	7 1	6 2	3565.43	933.15	.208066E+03	.215736E+03
(010)	(110)	3 0	3 -2	3565.59	1813.67	.177675E-01	.377064E+01
(000)	(100)	7 2	8 -4	3565.60	1063.04	.919413E-02	.533099E-01
(000)	(020)	9 -7	9 -1	3565.65	1079.23	.184395E+00	.385152E+00
(000)	(100)	10 -2	10 -4	3565.88	1618.13	.310392E+00	.257837E+02

(000)	(020)	7 -1	8 -1	3565.93	842.97	.404453E+01	.272112E+01
(000)	(020)	6 -1	7 1	3566.00	649.73	.103042E+02	.279793E+01
(000)	(001)	7 5	6 6	3566.47	1221.06	.179695E+02	.740730E+02
(000)	(001)	7 4	6 5	3566.48	1221.05	.748543E+01	.925634E+02
(000)	(100)	9 -1	9 -3	3566.55	1362.21	.282428E+01	.229057E+02
(000)	(100)	4 -3	3 -3	3566.61	224.65	.328499E+03	.114073E+02
(000)	(001)	7 0	6 1	3567.49	929.72	.775080E+02	.237026E+03
(010)	(110)	3 -2	2 -2	3567.63	1739.52	.440115E-01	.653556E+01
(000)	(001)	5 1	5 -4	3568.09	509.40	.903375E-02	.122707E-02
(000)	(100)	7 -3	7 -5	3568.71	782.45	.256297E+02	.128900E+02
(000)	(001)	10 -1	10 -4	3568.75	1724.02	.546442E+00	.251031E+02
(000)	(100)	8 -3	7 1	3568.84	1007.08	.136201E+01	.201111E+01
(000)	(001)	8 -6	7 -5	3568.96	882.98	.151099E+03	.369150E+03
(000)	(100)	4 1	4 -1	3568.96	382.96	.872447E+02	.646165E+01
(000)	(001)	8 -5	7 -4	3569.69	885.85	.442234E+03	.365056E+03
(000)	(020)	7 -4	8 -2	3569.70	709.84	.847026E+00	.902007E+00
(000)	(001)	9 -9	8 -8	3569.70	920.12	.378990E+03	.368720E+03
(000)	(001)	9 -8	8 -7	3569.71	920.16	.128734E+03	.375806E+03
(000)	(100)	8 0	7 2	3569.89	1133.84	.210194E+00	.170933E+01
(010)	(110)	7 -3	8 -7	3571.06	2393.01	.138292E-03	.156953E+00
(000)	(001)	7 -3	6 -2	3571.08	782.45	.603880E+03	.303511E+03
(000)	(001)	8 7	9 2	3571.38	1798.24	.205000E-04	.134329E-02
(000)	(001)	8 8	9 3	3571.59	1798.24	.541516E-02	.106444E+01
(010)	(110)	6 1	7 -5	3571.77	2399.96	.160802E-03	.188646E+00
(000)	(100)	7 -2	8 -8	3572.11	817.56	.704396E-01	.125646E+00
(000)	(100)	3 2	3 0	3573.63	285.50	.258601E+02	.359618E+01
(000)	(001)	6 2	7 -7	3574.54	759.38	.110656E+01	.149231E+01
(000)	(100)	4 -4	3 -2	3574.60	222.03	.100997E+03	.103571E+02
(000)	(020)	5 -4	5 2	3574.77	326.63	.840384E-01	.142298E-01
(000)	(001)	4 0	3 -3	3575.05	315.91	.568759E+02	.914728E+01
(010)	(110)	6 -2	5 0	3575.09	2211.51	.186963E-02	.266326E+01
(010)	(110)	2 1	2 -1	3575.11	1742.31	.470325E-01	.235548E+01
(000)	(001)	7 -2	6 -1	3575.80	817.56	.147598E+03	.263003E+03
(010)	(110)	4 2	4 0	3575.92	2006.30	.114030E-01	.607096E+01
(000)	(100)	10 6	9 8	3576.22	2269.59	.202610E-03	.381174E+00
(000)	(100)	10 5	9 9	3576.22	2269.59	.607828E-03	.381173E+00
(000)	(100)	4 -1	4 -3	3577.30	300.52	.103501E+03	.525021E+01
(000)	(100)	5 -3	5 -5	3577.39	399.43	.781466E+02	.624864E+01
(000)	(001)	4 3	4 0	3577.72	488.94	.482731E+01	.592832E+00
(000)	(100)	8 -2	8 -4	3578.00	1050.64	.354383E+01	.192950E+02
(010)	(110)	7 -3	7 -5	3578.72	2393.01	.835031E-02	.968353E+01
(000)	(100)	8 -1	7 3	3578.96	1124.98	.606139E+00	.157074E+01
(000)	(100)	3 3	3 1	3579.42	285.70	.795175E+02	.368355E+01
(000)	(020)	8 -2	9 -2	3579.52	1050.64	.511819E+00	.278548E+01
(000)	(020)	6 -3	5 3	3579.53	553.13	.461037E-01	.769854E-02
(000)	(100)	9 1	8 3	3579.84	1481.97	.837107E-01	.122981E+01
(000)	(100)	8 4	7 6	3580.38	1417.81	.125188E-01	.396111E+00
(000)	(100)	8 3	7 7	3580.40	1417.79	.375332E-01	.396039E+00
(000)	(100)	5 2	6 -4	3580.59	611.33	.687146E-01	.454891E-01
(000)	(100)	8 -4	9 -8	3581.13	982.95	.139473E-01	.548435E-01
(000)	(100)	9 0	8 4	3582.09	1479.75	.283602E-01	.120709E+01
(010)	(110)	4 -2	4 -4	3582.50	1875.44	.172785E-01	.490287E+01
(010)	(110)	2 -1	1 -1	3582.67	1677.07	.112530E+00	.411143E+01
(000)	(020)	10 -4	9 2	3582.67	1538.38	.983708E-04	.554515E-02
(000)	(001)	9 -6	9 -9	3583.32	1080.65	.390728E+01	.245295E+02
(000)	(100)	4 2	4 0	3583.33	384.29	.315692E+02	.703094E+01
(000)	(100)	4 -2	3 0	3583.64	275.49	.221901E+02	.293300E+01
(000)	(100)	3 -2	2 -2	3583.68	142.29	.107585E+03	.750609E+01
(000)	(100)	6 -1	7 -7	3584.26	649.73	.653380E-01	.173679E-01
(000)	(100)	9 5	8 7	3584.52	1820.70	.515523E-02	.374833E+00
(000)	(100)	9 4	8 8	3584.52	1820.70	.171838E-02	.374826E+00
(000)	(001)	5 3	6 -6	3584.65	611.56	.269218E+01	.594056E+00
(000)	(001)	9 -7	9 -8	3584.75	1079.23	.837868E+01	.178231E+02
(010)	(110)	4 -2	3 0	3584.79	1875.44	.807927E-02	.229107E+01
(000)	(100)	5 -1	4 1	3585.41	446.64	.153935E+02	.154009E+01
(010)	(110)	3 -3	2 -1	3585.53	1731.89	.968449E-01	.459844E+01

(000)	(100)	7 -2	6 2	3585.62	817.56	.865453E+00	.153792E+01
(000)	(001)	5 2	5 -1	3586.01	611.33	.381999E+01	.252501E+01
(000)	(100)	7 -1	7 -3	3586.77	842.97	.261893E+02	.175173E+02
(000)	(100)	8 1	9 -5	3586.93	1259.29	.238531E-01	.117443E+00
(000)	(001)	10 -5	10 -8	3587.29	1447.25	.362989E+01	.440043E+02
(000)	(100)	5 1	5 -1	3587.60	509.40	.789849E+02	.106703E+02
(000)	(001)	4 4	5 -5	3587.64	488.96	.986717E+01	.362560E+01
(000)	(001)	7 -5	6 -4	3588.55	704.23	.937208E+03	.322150E+03
(000)	(100)	6 -2	6 -4	3589.06	602.86	.199217E+02	.126334E+02
(000)	(100)	6 0	6 -2	3589.53	662.20	.171358E+02	.144414E+02
(000)	(100)	3 2	4 -4	3589.75	283.50	.953430E-01	.131991E-01
(000)	(001)	8 -8	7 -7	3589.89	744.03	.265186E+03	.330834E+03
(000)	(001)	8 -7	7 -6	3589.92	744.13	.776187E+03	.322930E+03
(000)	(100)	3 0	3 -2	3590.22	206.41	.437298E+02	.414271E+01
(000)	(001)	7 -4	6 -3	3590.40	709.84	.296895E+03	.314344E+03
(000)	(001)	6 4	5 5	3591.13	891.26	.364150E+02	.919969E+02
(000)	(001)	6 3	5 4	3591.15	891.23	.835831E+02	.720619E+02
(000)	(100)	9 -2	10 -8	3591.57	1343.40	.879856E-02	.194252E+00
(000)	(001)	7 6	8 1	3591.73	1400.82	.332707E-01	.967305E+00
(000)	(100)	5 0	6 -6	3591.73	504.58	.102333E+00	.405585E-01
(000)	(001)	9 6	10 1	3592.33	2022.04	.215517E-05	.123171E-02
(000)	(001)	6 2	5 3	3592.33	759.38	.112253E+03	.150635E+03
(000)	(001)	6 0	5 1	3592.60	662.20	.272733E+03	.229652E+03
(010)	(110)	3 1	3 -1	3592.71	2131.19	.267424E-01	.859699E+01
(000)	(001)	4 2	4 -3	3592.75	384.29	.490177E+01	.108884E+01
(000)	(001)	7 7	8 2	3592.79	1400.82	.478844E-03	.463924E-02
(000)	(100)	6 1	7 -5	3592.82	758.34	.283228E+00	.103792E+00
(000)	(001)	6 1	5 2	3593.08	758.34	.377056E+03	.167786E+03
(000)	(001)	9 7	10 2	3593.11	2022.04	.128522E-02	.244786E+00
(000)	(100)	4 1	3 -5	3593.86	382.96	.434460E+00	.319547E-01
(000)	(100)	6 0	5 2	3594.12	662.20	.124216E+01	.104550E+01
(000)	(020)	9 -3	10 -3	3594.22	1283.24	.548082E+00	.302053E+01
(000)	(001)	6 -2	5 -1	3594.48	602.86	.403354E+03	.256669E+03
(000)	(001)	6 1	6 -2	3595.19	758.34	.771296E+01	.343018E+01
(010)	(110)	2 2	2 0	3596.13	1743.49	.207509E-01	.311564E+01
(000)	(001)	10 -6	10 -7	3596.45	1438.35	.108684E+01	.377787E+02
(010)	(110)	6 -2	6 -4	3596.68	2211.51	.670506E-02	.949391E+01
(000)	(020)	6 -6	7 -2	3596.91	446.67	.603280E+00	.180519E+00
(000)	(020)	7 -2	8 0	3597.26	817.56	.136866E+01	.242425E+01
(000)	(100)	8 -1	9 -7	3597.38	1124.98	.740410E-01	.190887E+00
(010)	(020)	8 -7	9 7	3597.56	2337.94	.734351E-07	.652619E-04
(000)	(020)	6 -3	6 1	3597.64	447.25	.254640E+00	.254641E-01
(000)	(100)	7 0	8 -6	3598.16	929.72	.523925E-01	.158855E+00
(000)	(100)	3 -3	2 -1	3598.16	136.75	.251223E+03	.566500E+01
(000)	(001)	6 -1	5 0	3599.30	649.73	.737318E+03	.199987E+03
(000)	(100)	7 -4	6 0	3599.54	709.84	.822759E+00	.868901E+00
(000)	(100)	4 -2	4 -4	3599.76	273.49	.460123E+02	.605452E+01
(000)	(100)	7 1	6 3	3599.89	933.15	.817445E+00	.839464E+00
(000)	(100)	2 1	2 -1	3599.95	134.96	.114963E+03	.257030E+01
(010)	(110)	1 0	0 0	3600.02	1634.96	.275445E-01	.245525E+01
(010)	(110)	6 -2	7 -6	3600.15	2211.51	.122755E-03	.173645E+00
(000)	(001)	10 -3	10 -6	3600.35	1584.04	.181453E+01	.422311E+02
(000)	(100)	2 -1	1 -1	3600.96	79.50	.277632E+03	.475651E+01
(000)	(100)	9 0	10 -6	3601.49	1479.75	.453670E-02	.192054E+00
(010)	(110)	3 -1	3 -3	3601.57	1772.38	.850119E-01	.487966E+01
(000)	(001)	7 0	7 -3	3603.14	929.72	.469443E+01	.142139E+02
(000)	(100)	7 0	6 4	3603.35	929.72	.268745E+00	.813665E+00
(000)	(100)	8 -3	7 -1	3603.50	885.85	.731903E+00	.614858E+00
(010)	(110)	3 -1	4 1	3603.80	2054.20	.519450E-02	.115089E+01
(000)	(100)	5 -1	5 -3	3603.83	446.64	.120273E+03	.119716E+02
(000)	(001)	8 -5	8 -8	3603.97	885.85	.209945E+02	.171657E+02
(010)	(110)	3 1	3 -1	3604.02	1819.41	.821140E-01	.590153E+01
(000)	(020)	9 -9	9 -3	3604.33	920.12	.393552E-01	.379208E-01
(000)	(100)	6 -3	5 1	3604.39	553.13	.592239E+01	.982118E+00
(000)	(020)	7 -6	8 -4	3604.91	586.46	.314640E+00	.183630E+00
(000)	(001)	9 -4	9 -7	3605.24	1217.27	.297297E+01	.357147E+02

(000)	(001)	9 -2	9 -5	3606.64	1343.40	.175602E+01	.386069E+02
(010)	(110)	5 -1	5 -3	3606.81	2054.20	.417511E-01	.924258E+01
(000)	(100)	8 2	7 4	3606.82	1260.01	.389336E-01	.573839E+00
(000)	(100)	6 -1	5 3	3606.83	649.73	.339680E+01	.894537E+00
(000)	(001)	8 -6	8 -7	3606.89	882.98	.994155E+01	.240328E+02
(000)	(100)	7 -3	8 -7	3607.42	782.45	.139273E+00	.692937E-01
(000)	(001)	8 -1	8 -4	3607.53	1124.98	.792502E+01	.203742E+02
(000)	(100)	8 1	7 5	3607.55	1259.29	.116494E+00	.570243E+00
(000)	(010)	9 -8	10 10	3607.89	920.16	.314295E-08	.907796E-08
(000)	(001)	6 -4	5 -3	3608.22	542.89	.584169E+03	.276403E+03
(010)	(110)	6 0	6 -2	3608.45	2283.60	.549342E-02	.109543E+02
(010)	(110)	4 0	4 -2	3608.64	1923.05	.229584E-01	.812583E+01
(000)	(020)	3 -1	4 3	3609.47	173.37	.346243E+00	.928204E-02
(000)	(001)	3 3	3 -2	3609.85	285.70	.643823E+02	.295729E+01
(000)	(001)	7 -7	6 -6	3609.99	586.22	.143394E+04	.278246E+03
(000)	(001)	7 -6	6 -5	3610.10	586.46	.489747E+03	.285416E+03
(010)	(110)	2 -2	1 0	3610.31	1664.95	.167764E-01	.172175E+01
(000)	(001)	6 -3	5 -2	3611.64	553.13	.158485E+04	.262291E+03
(000)	(100)	4 0	4 -2	3612.37	315.91	.637371E+02	.101448E+02
(000)	(001)	3 1	2 -2	3612.99	212.26	.307655E+03	.992854E+01
(000)	(100)	8 8	9 4	3613.10	1798.24	.110570E-02	.214847E+00
(000)	(020)	8 8	9 4	3613.10	1798.24	.478182E-04	.929149E-02
(010)	(110)	3 -1	2 1	3613.32	1772.38	.123462E-01	.706362E+00
(010)	(110)	2 0	2 -2	3613.53	1693.62	.384579E-01	.452450E+01
(000)	(100)	2 2	2 0	3614.30	136.22	.536880E+02	.360845E+01
(000)	(001)	8 3	9 0	3614.44	1598.74	.419738E-02	.104414E+00
(000)	(100)	3 1	3 -1	3615.34	212.26	.220547E+03	.711280E+01
(000)	(100)	3 -1	2 1	3615.35	173.37	.337829E+02	.904176E+00
(000)	(100)	9 -6	8 -2	3615.79	1080.65	.637153E-01	.396406E+00
(000)	(020)	10 -8	10 -2	3615.79	1293.23	.148355E-01	.255778E+00
(000)	(100)	5 -2	4 2	3617.06	416.40	.304083E+01	.782596E+00
(000)	(001)	8 6	9 1	3617.87	1598.74	.397471E-03	.296344E-01
(000)	(100)	3 -1	3 -3	3618.09	173.37	.223676E+03	.598201E+01
(000)	(001)	5 3	4 4	3619.00	611.56	.316641E+03	.692069E+02
(000)	(001)	5 2	4 3	3619.19	611.33	.138393E+03	.906391E+02
(010)	(110)	1 1	1 -1	3619.26	1640.48	.107431E+00	.326023E+01
(000)	(001)	6 5	7 0	3619.26	1048.63	.152677E-01	.271304E-01
(000)	(100)	4 0	3 2	3619.86	315.91	.303698E+01	.482387E+00
(000)	(100)	1 0	0 0	3619.91	37.14	.683865E+02	.285379E+01
(000)	(001)	5 -1	4 0	3620.02	446.64	.199290E+04	.197480E+03
(000)	(001)	5 1	4 2	3620.53	509.40	.121103E+04	.162114E+03
(000)	(001)	9 -5	9 -6	3621.09	1202.07	.113740E+02	.421593E+02
(000)	(001)	8 -3	8 -6	3621.33	1007.08	.264218E+02	.384481E+02
(010)	(110)	5 -1	6 -5	3622.67	2054.20	.966969E-03	.213124E+00
(000)	(100)	2 -2	1 0	3623.18	70.08	.440913E+02	.215281E+01
(000)	(001)	5 0	4 1	3623.78	504.58	.362742E+03	.142219E+03
(000)	(001)	6 6	7 1	3623.86	1048.63	.147344E+00	.784485E+00
(000)	(001)	7 -4	7 -7	3624.08	709.84	.224158E+02	.235127E+02
(000)	(100)	5 1	4 3	3625.74	509.40	.261612E+01	.349703E+00
(000)	(020)	4 -2	5 2	3625.91	275.49	.319402E+00	.417252E-01
(000)	(020)	9 -3	8 3	3626.03	1283.24	.531679E-03	.290442E-02
(000)	(020)	7 -6	7 0	3627.43	586.46	.589701E-01	.342025E-01
(000)	(100)	6 2	5 4	3627.58	759.38	.211498E+00	.281056E+00
(000)	(100)	6 1	5 5	3628.63	758.34	.631853E+00	.278414E+00
(000)	(001)	5 -3	4 -2	3628.96	399.43	.293176E+04	.231094E+03
(010)	(110)	6 0	5 2	3629.13	2283.60	.374660E-03	.742840E+00
(000)	(020)	10 0	10 2	3629.22	1729.71	.462168E-01	.643658E+01
(000)	(001)	7 -5	7 -6	3629.82	704.23	.493276E+02	.167628E+02
(000)	(001)	6 -6	5 -5	3629.93	446.67	.817243E+03	.242318E+03
(000)	(001)	6 -5	5 -4	3630.24	447.25	.234017E+04	.231917E+03
(000)	(100)	5 0	4 4	3630.59	504.58	.846330E+00	.331203E+00
(000)	(100)	2 0	2 -2	3630.79	95.18	.985216E+02	.541426E+01
(000)	(100)	6 -2	7 -6	3631.25	602.86	.144362E+00	.904840E-01
(000)	(100)	9 7	10 3	3631.30	2022.04	.256796E-02	.483956E+00
(000)	(100)	9 6	10 4	3631.33	2022.04	.855751E-03	.483819E+00
(010)	(110)	4 0	3 2	3631.87	1923.05	.102273E-02	.359668E+00

(000)	(100)	7 3	6 5	3633.28	1063.23	.936494E-01	.177791E+00
(000)	(100)	7 2	6 6	3633.47	1063.04	.311934E-01	.177489E+00
(000)	(001)	5 -2	4 -1	3633.58	416.40	.811480E+03	.207895E+03
(010)	(110)	6 -3	5 1	3634.16	2161.67	.117464E-02	.432057E+00
(000)	(001)	7 -2	7 -5	3634.38	817.56	.151497E+02	.265601E+02
(000)	(020)	10 -1	10 1	3634.49	1724.02	.130486E+00	.588597E+01
(000)	(100)	10 -7	9 -3	3634.84	1293.92	.449840E-01	.258021E+00
(000)	(100)	4 -1	3 3	3635.47	300.52	.732038E+01	.358477E+00
(010)	(110)	2 2	3 -2	3635.97	1743.49	.161092E-02	.239232E+00
(010)	(110)	5 -2	4 2	3636.18	2024.43	.769109E-03	.439259E+00
(010)	(110)	4 0	5 -4	3636.69	1923.05	.778101E-03	.273275E+00
(000)	(020)	8 -3	9 -1	3637.80	1007.08	.141453E+01	.204906E+01
(000)	(100)	1 1	1 -1	3638.09	42.37	.269300E+03	.382192E+01
(000)	(001)	9 4	10 -1	3638.36	1820.70	.623442E-03	.133978E+00
(000)	(020)	8 -5	9 -3	3638.60	885.85	.767949E+00	.621922E+00
(000)	(001)	9 -4	10 -9	3639.11	1217.27	.132934E-01	.158209E+00
(000)	(020)	9 1	9 3	3639.20	1481.97	.361134E+00	.509718E+01
(000)	(100)	9 9	10 5	3639.61	2238.53	.386309E-03	.205101E+00
(000)	(100)	9 8	10 6	3639.61	2238.53	.123768E-03	.205099E+00
(000)	(100)	4 -3	3 1	3640.27	224.85	.923134E+01	.314094E+00
(010)	(110)	6 -1	5 3	3640.54	2272.74	.900019E-03	.562874E+00
(000)	(020)	3 -2	4 4	3640.56	142.29	.697679E-01	.479287E-02
(000)	(100)	5 -4	4 0	3640.99	326.63	.138270E+01	.229867E+00
(000)	(100)	10 1	9 5	3641.05	1883.60	.358992E-03	.347423E-01
(000)	(020)	10 1	9 5	3641.05	1883.60	.226281E-01	.218989E+01
(010)	(110)	3 1	4 -3	3641.06	1819.41	.443061E-02	.315188E+00
(000)	(020)	9 0	9 2	3641.30	1479.75	.117835E+00	.493467E+01
(000)	(001)	3 2	3 -1	3641.57	285.50	.319112E+00	.435496E-01
(000)	(001)	7 4	8 -1	3642.07	1221.05	.103196E-01	.124961E+00
(000)	(001)	6 -1	6 -4	3643.05	649.73	.908829E+02	.236958E+02
(000)	(001)	6 -3	6 -6	3643.08	553.13	.911293E+02	.149516E+02
(000)	(001)	2 2	1 -1	3643.27	136.22	.969525E+02	.646452E+01
(010)	(110)	7 -4	6 0	3643.54	2319.03	.113374E-03	.265355E+00
(000)	(020)	4 4	5 4	3643.66	488.96	.109370E+02	.395691E+01
(000)	(020)	4 3	5 5	3643.72	488.94	.325868E+02	.392944E+01
(000)	(020)	9 -5	9 1	3644.07	1202.07	.211881E+00	.780411E+00
(000)	(001)	4 1	4 -2	3645.43	382.96	.774632E+02	.561663E+01
(000)	(020)	5 -3	6 1	3645.46	399.43	.144729E+01	.113565E+00
(000)	(020)	8 -4	8 2	3645.76	982.95	.149656E+00	.578044E+00
(000)	(001)	5 0	5 -3	3646.53	504.58	.238581E+02	.929563E+01
(000)	(001)	8 -4	8 -5	3647.04	982.95	.932633E+01	.360109E+02
(010)	(110)	4 -1	3 3	3647.13	1908.19	.215125E-02	.233854E+00
(000)	(001)	4 0	3 1	3647.27	315.91	.678855E+03	.138546E+03
(000)	(001)	9 3	10 0	3647.44	1820.70	.173287E-02	.123822E+00
(000)	(100)	3 -2	2 2	3647.72	142.29	.366726E+01	.251437E+00
(000)	(001)	4 2	3 3	3647.83	384.29	.403785E+03	.883389E+02
(010)	(110)	4 -3	3 1	3648.07	1821.67	.199370E-02	.143099E+00
(010)	(110)	3 -2	2 2	3648.27	1739.52	.102855E-02	.149361E+00
(000)	(001)	4 1	3 2	3648.92	382.96	.891668E+03	.645929E+02
(000)	(020)	8 2	8 4	3649.28	1260.01	.271519E+00	.395534E+01
(000)	(001)	5 4	6 -1	3649.41	743.95	.749037E+00	.918870E+00
(000)	(001)	5 -5	4 -4	3649.56	325.33	.347558E+04	.190953E+03
(000)	(100)	6 -5	5 -1	3649.75	447.25	.141715E+01	.139693E+00
(000)	(020)	8 1	8 3	3649.98	1259.29	.809658E+00	.391725E+01
(010)	(110)	3 3	4 -1	3650.12	1907.72	.274026E-02	.296969E+00
(000)	(100)	5 -1	6 -5	3650.16	446.64	.130897E+01	.128638E+00
(000)	(001)	5 -4	4 -3	3650.41	326.63	.117863E+04	.195436E+03
(000)	(001)	10 -4	10 -5	3650.54	1538.38	.106642E+01	.589961E+02
(000)	(020)	7 -7	8 -3	3650.92	586.22	.912779E+00	.175133E+00
(010)	(110)	5 [illegible]	4 3	3651.37	2131.19	.793409E-03	.251596E+00
(000)	(001)	4 -2	3 -1	3651.58	275.49	.141631E+04	.183784E+03
(000)	(100)	9 -3	10 -7	3652.73	1283.24	.196403E-01	.106505E+00
(000)	(001)	6 -4	6 -5	3653.67	542.89	.493746E+02	.230713E+02
(000)	(001)	7 5	8 0	3654.09	1221.06	.217613E-02	.675523E-02
(000)	(001)	9 -5	10-10	3654.30	1202.07	.489961E-03	.179960E-02
(000)	(100)	6 6	7 2	3655.10	1048.63	.388291E-01	.204966E+00

(000)	(100)	6 5	7 3	3655.31	1048.63	.116385E+00	.204773E+00
(010)	(110)	5 0	4 4	3655.53	2127.10	.244932E-03	.227651E+00
(000)	(020)	7 -3	7 3	3655.59	782.45	.742384E+00	.364497E+00
(000)	(001)	4 -1	3 0	3656.27	300.52	.306959E+04	.149458E+03
(010)	(110)	4 4	5 0	3656.76	2129.84	.303538E-03	.285756E+00
(000)	(001)	8 -3	9 -8	3656.90	1007.08	.213759E-01	.308029E-01
(000)	(100)	5 5	6 1	3658.07	743.96	.609322E+00	.248581E+00
(000)	(020)	10 -6	10 0	3658.58	1438.35	.261095E-01	.892159E+00
(000)	(020)	7 3	7 5	3659.14	1063.23	.149254E+01	.281353E+01
(000)	(100)	5 4	6 2	3659.23	743.95	.202350E+00	.247564E+00
(010)	(110)	5 -4	4 0	3659.28	1922.94	.204354E-03	.712900E-01
(000)	(020)	7 2	7 4	3659.32	1063.04	.496857E+00	.280712E+01
(000)	(001)	5 -2	5 -5	3660.20	416.40	.802676E+02	.204144E+02
(000)	(100)	2 2	3 -2	3660.41	136.22	.332756E+01	.220833E+00
(000)	(100)	7 7	8 3	3660.99	1400.82	.156701E-01	.148990E+00
(000)	(100)	7 6	8 4	3661.02	1400.82	.522308E-02	.148981E+00
(000)	(020)	5 3	6 3	3661.22	611.56	.178803E+02	.386296E+01
(000)	(020)	5 2	6 4	3661.63	611.33	.530417E+01	.375732E+01
(000)	(100)	4 0	5 -4	3662.08	315.91	.121843E+01	.191302E+00
(000)	(100)	4 4	5 0	3663.50	488.96	.298908E+00	.107557E+00
(010)	(110)	1 -1	1 1	3664.13	1618.54	.921750E-01	.248711E+01
(000)	(001)	5 5	6 0	3664.29	743.96	.186434E+00	.759291E-01
(000)	(001)	8 3	9 -2	3664.45	1417.79	.357290E-01	.368157E+00
(000)	(020)	8 -7	8 -1	3664.77	744.13	.955134E-01	.389264E-01
(000)	(100)	7 -6	6 -2	3665.27	586.46	.147132E+00	.844550E-01
(000)	(100)	3 1	4 -3	3665.56	212.26	.805026E+01	.256070E+00
(010)	(110)	4 3	5 1	3666.01	2129.82	.864851E-03	.270685E+00
(000)	(100)	3 3	4 -1	3666.22	285.70	.586703E+01	.265348E+00
(010)	(110)	6 1	5 5	3666.56	2399.96	.182463E-03	.208524E+00
(000)	(020)	6 4	6 6	3668.46	891.26	.621555E+00	.153716E+01
(000)	(020)	6 3	6 5	3668.49	891.23	.186423E+01	.153657E+01
(000)	(100)	4 3	5 1	3668.58	488.94	.109790E+01	.131492E+00
(000)	(001)	4 -4	3 -3	3668.93	222.03	.159156E+04	.159016E+03
(000)	(001)	6 3	7 -2	3669.30	891.23	.429552E-02	.353976E-02
(000)	(001)	10 -6	9 -1	3669.36	1438.35	.250799E-03	.854458E-02
(000)	(020)	6 -2	6 4	3670.10	602.86	.300126E+00	.186124E+00
(000)	(001)	4 -3	3 -2	3670.70	224.85	.413697E+04	.139565E+03
(010)	(110)	4 2	5 -2	3670.91	2006.30	.106047E-02	.549986E+00
(000)	(020)	6 -4	7 0	3671.00	542.89	.473382E+00	.220153E+00
(000)	(020)	8 -2	7 4	3671.72	1050.64	.218223E-03	.115784E-02
(010)	(110)	1 0	2 -2	3672.19	1634.96	.135846E-01	.118711E+01
(000)	(001)	7 -2	8 -7	3672.31	817.56	.126559E+00	.219588E+00
(000)	(001)	9 -5	8 0	3673.08	1202.07	.224103E-01	.818907E-01
(000)	(001)	7 -3	7 -4	3673.09	782.45	.876455E+02	.428273E+02
(000)	(100)	8 -2	9 -6	3673.18	1050.64	.371153E-01	.196843E+00
(000)	(020)	10 -5	9 3	3673.92	1447.25	.267264E-03	.316357E-02
(000)	(001)	4 -1	4 -4	3674.37	300.52	.181101E+03	.877437E+01
(010)	(110)	3 2	4 0	3674.66	1907.56	.925387E-03	.298621E+00
(010)	(110)	2 -2	2 0	3674.67	1664.95	.330031E-01	.332776E+01
(000)	(100)	1 -1	1 1	3674.68	23.79	.241786E+03	.310771E+01
(000)	(001)	3 1	2 2	3675.21	212.26	.193631E+04	.614364E+02
(000)	(001)	4 3	5 -2	3675.83	488.94	.952689E+00	.113995E+00
(000)	(001)	9 -3	9 -4	3676.05	1283.24	.106034E+02	.571352E+02
(000)	(001)	3 -1	2 0	3676.06	173.37	.503346E+04	.132492E+03
(000)	(020)	4 -3	5 3	3676.65	224.85	.441102E+00	.143591E-01
(000)	(020)	9 3	8 5	3676.67	1638.83	.494438E-04	.146542E-02
(000)	(020)	9 2	8 6	3676.81	1638.69	.162784E-04	.144635E-02
(000)	(100)	7 5	8 1	3678.05	1221.06	.115147E+00	.460252E+00
(000)	(001)	5 -3	5 -4	3678.06	399.43	.212328E+03	.165132E+02
(000)	(020)	6 2	7 2	3678.12	759.38	.290395E+01	.389599E+01
(000)	(001)	10 -4	9 1	3678.23	1538.38	.844954E-02	.463925E+00
(000)	(100)	7 4	8 2	3678.88	1221.05	.382319E-01	.458324E+00
(000)	(001)	3 0	2 1	3679.68	206.41	.903401E+03	.635024E+02
(000)	(020)	6 1	7 3	3679.70	758.34	.825427E+01	.358661E+01
(000)	(100)	2 -2	2 0	3680.44	70.08	.855170E+02	.411050E+01
(010)	(110)	0 0	1 0	3680.52	1594.74	.199962E-01	.143765E+01

(000)	(100)	10 -6	9 0	3680.60	1438.35	.319415E-02	.108485E+00
(000)	(100)	6 4	7 0	3680.90	891.26	.222926E+00	.549455E+00
(010)	(110)	6 -5	5 -1	3680.99	2042.91	.120882E-03	.248390E-01
(000)	(001)	8 -4	9 -9	3681.02	982.95	.544200E-02	.208183E-01
(010)	(110)	2 1	3 -1	3681.12	1742.31	.987443E-02	.480084E+00
(000)	(020)	8 -7	9 -5	3681.13	744.13	.336913E+00	.156985E+00
(000)	(100)	4 2	5 -2	3681.97	384.29	.214048E+01	.463947E+00
(000)	(100)	3 2	4 0	3682.12	285.50	.218192E+01	.294484E+00
(000)	(100)	8 6	9 2	3682.60	1598.74	.476282E-02	.348843E+00
(000)	(100)	8 5	9 3	3682.94	1598.74	.142817E-01	.348666E+00
(000)	(020)	10-10	10 -4	3683.75	1114.46	.370871E-02	.266341E-01
(000)	(001)	6 -1	7 -6	3684.32	649.73	.191115E+00	.492710E-01
(000)	(001)	3 0	3 -3	3684.55	206.41	.111931E+03	.103322E+02
(000)	(100)	6 3	7 1	3684.69	891.23	.660348E+00	.541892E+00
(010)	(001)	8 -7	9 8	3684.80	2337.94	.213958E-06	.180721E-03
(000)	(100)	5 3	6 -1	3684.86	611.56	.974431E+00	.209175E+00
(000)	(001)	9 2	10 -3	3685.57	1638.69	.972752E-02	.862246E+00
(000)	(100)	8 -7	7 -3	3685.61	744.13	.136833E+00	.554508E-01
(010)	(110)	5 1	6 -3	3685.81	2131.19	.208137E-02	.652206E+00
(000)	(020)	6 -6	5 4	3685.95	446.67	.136937E-02	.399858E-03
(000)	(020)	5 -1	5 5	3686.02	446.64	.625937E+00	.609148E-01
(000)	(001)	7 2	8 -3	3686.48	1063.04	.292865E-07	.164242E-06
(000)	(020)	7 -7	6 3	3686.56	586.22	.625601E-02	.118872E-02
(010)	(110)	5 3	6 -1	3687.00	2252.71	.104077E-02	.583843E+00
(000)	(100)	9 -7	8 -1	3687.11	1079.23	.495915E-01	.100171E+00
(000)	(100)	7 -1	8 -5	3687.57	842.97	.457218E+00	.297461E+00
(000)	(001)	3 -3	2 -2	3688.50	136.75	.505021E+04	.111150E+03
(000)	(100)	1 0	2 -2	3688.83	37.14	.340939E+02	.139617E+01
(000)	(001)	5 2	6 -3	3688.91	611.33	.601541E+00	.386527E+00
(000)	(100)	8 -6	7 0	3689.10	882.98	.321844E-01	.760673E-01
(000)	(001)	8 -4	7 1	3689.54	982.95	.614384E-01	.234489E+00
(000)	(001)	8 4	9 -1	3689.90	1417.81	.225310E-03	.691752E-02
(000)	(001)	2 1	2 -2	3690.29	134.96	.638252E+00	.139205E-01
(000)	(100)	10 -8	9 -2	3690.74	1293.23	.663190E-02	.112019E+00
(000)	(100)	3 -3	3 -1	3690.85	136.75	.182284E+03	.400934E+01
(000)	(001)	3 -2	2 -1	3691.27	142.29	.151942E+04	.102946E+03
(000)	(001)	9 -2	10 -7	3691.40	1343.40	.337153E-01	.179826E+01
(000)	(001)	3 2	4 -3	3691.54	283.50	.214398E+02	.288626E+01
(010)	(110)	3 -3	3 -1	3691.54	1731.69	.714570E-01	.329552E+01
(000)	(100)	3 -1	3 1	3691.75	173.37	.178135E+03	.466900E+01
(000)	(020)	9 -4	10 -2	3691.75	1217.27	.131222E+00	.153945E+01
(000)	(100)	5 1	6 -3	3691.89	509.40	.382672E+01	.502361E+00
(000)	(001)	5 0	6 -5	3691.98	504.58	.143494E+01	.552200E+00
(000)	(020)	9 -4	8 4	3692.02	1217.27	.183690E-03	.217828E-02
(000)	(100)	4 -2	4 0	3692.13	275.49	.509372E+02	.654125E+01
(010)	(110)	6 0	7 -4	3692.53	2253.60	.315875E-03	.615534E+00
(000)	(100)	2 1	3 -1	3692.64	134.96	.243537E+02	.530824E+00
(000)	(100)	0 0	1 0	3693.26	0.00	.531106E+02	.181795E+01
(000)	(020)	8 -8	7 2	3693.47	744.03	.189602E-02	.229905E-02
(000)	(100)	6 0	7 -4	3694.04	662.20	.508767E+00	.416639E+00
(010)	(110)	2 0	2 2	3694.17	1693.62	.163653E-01	.190633E+01
(000)	(020)	7 1	8 1	3694.22	933.15	.374762E+01	.375030E+01
(000)	(001)	4 1	5 -4	3694.53	382.96	.248253E+01	.177617E+00
(000)	(100)	2 0	2 2	3694.83	95.18	.426836E+02	.230502E+01
(010)	(110)	2 -1	3 -3	3696.88	1677.07	.623830E-01	.220884E+01
(000)	(020)	9 9	9 7	3696.97	2238.53	.512012E-03	.267623E+00
(000)	(020)	9 8	9 6	3696.97	2238.53	.170669E-03	.267620E+00
(000)	(100)	9 -5	8 1	3697.04	1202.07	.143968E-01	.529935E-01
(000)	(001)	6 1	7 -4	3697.20	758.34	.180255E+01	.779528E+00
(010)	(110)	3 -1	3 1	3697.36	1772.38	.706794E-01	.395187E+01
(000)	(001)	6 -2	6 -3	3697.38	602.86	.669264E+02	.411982E+02
(000)	(100)	5 -3	5 -1	3697.57	399.43	.922470E+02	.713638E+01
(000)	(100)	7 -5	6 1	3697.80	704.23	.131050E+00	.437155E-01
(000)	(100)	5 2	6 0	3698.05	611.33	.470532E+00	.301599E+00
(000)	(001)	8 -1	9 -6	3698.18	1124.98	.617263E+00	.154802E+01
(010)	(110)	1 -1	2 -1	3698.88	1618.54	.687006E-01	.183630E+01

(000)	(001)	8 -2	8 -3	3698.88	1050.64	.139290E+02	.733599E+02
(000)	(020)	7 0	8 2	3698.99	929.72	.115687E+01	.341203E+01
(000)	(001)	6 4	7 -1	3699.32	891.26	.151194E+00	.370797E+00
(000)	(001)	8 1	9 -4	3700.00	1259.29	.691696E-01	.330129E+00
(000)	(001)	7 0	8 -3	3700.27	929.72	.403772E+00	.119636E+01
(000)	(100)	8 4	9 0	3701.34	1417.81	.223482E-01	.684020E+00
(000)	(001)	4 -2	4 -3	3701.55	275.49	.195313E+03	.249934E+02
(000)	(001)	2 0	1 1	3701.82	95.18	.139439E+04	.751582E+02
(000)	(100)	7 3	8 -1	3703.11	1063.23	.433415E+00	.807313E+00
(000)	(100)	6 2	7 -2	3703.80	759.38	.182051E+00	.236946E+00
(000)	(100)	8 3	9 1	3703.90	1417.79	.661118E-01	.673972E+00
(000)	(001)	7 -5	6 0	3704.02	704.23	.273287E+01	.910097E+00
(000)	(020)	7 -5	8 -1	3704.67	704.23	.970484E+00	.323132E+00
(000)	(100)	9 5	10 1	3705.41	1820.70	.762765E-02	.536506E+00
(000)	(100)	6 -6	5 0	3705.79	446.67	.100109E+00	.290754E-01
(000)	(100)	9 4	10 2	3705.93	1820.70	.253629E-02	.535111E+00
(000)	(001)	10 -2	10 -3	3706.13	1618.13	.121373E+01	.969446E+02
(000)	(100)	4 -4	4 -2	3706.25	222.03	.338979E+02	.335269E+01
(000)	(100)	6 -2	6 0	3706.52	602.86	.119951E+02	.736567E+01
(000)	(100)	5 -5	4 1	3706.72	325.33	.359032E+00	.194215E-01
(010)	(110)	4 -2	4 0	3706.78	1875.44	.203466E-01	.557989E+01
(000)	(100)	7 -3	7 -1	3706.90	782.45	.179633E+02	.869756E+01
(000)	(020)	9 -9	8 1	3707.25	920.12	.430088E-02	.402908E-02
(000)	(001)	7 -3	8 -8	3707.37	782.45	.531756E-01	.257436E-01
(000)	(001)	8 -6	7 -1	3707.60	882.98	.184839E+00	.434693E+00
(000)	(001)	4 4	5 -1	3708.38	488.96	.841499E+00	.299134E+00
(000)	(100)	9 -8	8 -4	3708.48	920.16	.144990E-01	.407425E-01
(010)	(110)	2 -1	2 1	3708.63	1677.07	.298010E-01	.105184E+01
(000)	(100)	6 -4	6 -2	3708.84	542.89	.140774E+02	.648011E+01
(000)	(020)	8 0	9 0	3708.87	1133.84	.466991E+00	.365534E+01
(000)	(001)	9 0	10 -3	3709.17	1479.75	.135664E-01	.557640E+00
(000)	(100)	2 -1	2 1	3709.22	79.50	.828994E+02	.137881E+01
(000)	(001)	2 -2	1 -1	3709.41	70.08	.170299E+04	.812176E+02
(000)	(020)	8 -8	9 -4	3709.73	744.03	.138012E+00	.166615E+00
(000)	(020)	9 -8	9 -2	3710.00	920.16	.147707E-01	.414888E-01
(010)	(110)	5 2	6 0	3710.03	2252.54	.311809E-03	.521069E+00
(000)	(100)	7 -7	6 -1	3710.20	586.22	.172106E+00	.324939E-01
(000)	(001)	9 -3	8 2	3710.37	1283.24	.873538E-01	.466355E+00
(010)	(110)	7 -6	6 -2	3710.74	2181.31	.513507E-03	.609737E-02
(000)	(100)	5 -1	5 1	3710.88	446.64	.547130E+02	.528888E+01
(000)	(100)	1 -1	2 -1	3711.12	23.79	.185716E+03	.236360E+01
(000)	(001)	6 -4	5 1	3711.91	542.89	.254752E+01	.117170E+01
(000)	(100)	2 -1	3 -3	3711.96	79.50	.161391E+03	.268233E+01
(000)	(001)	2 -1	1 0	3712.21	79.50	.226128E+04	.375802E+02
(000)	(100)	7 2	8 0	3713.00	1063.04	.140069E+00	.779915E+00
(000)	(020)	8 4	7 6	3713.20	1417.81	.241891E-04	.737999E-03
(000)	(020)	8 3	7 7	3713.23	1417.79	.727526E-04	.739807E-03
(000)	(100)	6 -4	5 2	3713.43	542.89	.347647E-01	.159831E-01
(000)	(100)	8 -4	8 -2	3713.49	982.95	.228503E+01	.866491E+01
(000)	(100)	4 -4	3 2	3713.74	222.03	.694514E-01	.685526E-02
(000)	(100)	4 1	5 -1	3714.04	382.96	.862195E+01	.613627E+00
(010)	(110)	4 -4	4 -2	3714.22	1817.47	.132872E-01	.275410E+01
(010)	(110)	2 -2	3 -2	3714.51	1664.95	.225263E-01	.224702E+01
(000)	(020)	8 -3	7 5	3715.29	1007.08	.730486E-03	.103610E-02
(000)	(001)	7 -3	6 2	3716.13	782.45	.551521E-01	.266375E-01
(000)	(020)	5 -2	5 4	3716.22	416.40	.197882E+00	.495685E-01
(000)	(020)	7 -1	6 5	3716.75	842.97	.423268E-03	.273211E-03
(000)	(100)	3 -2	3 0	3716.84	142.29	.298735E+02	.201011E+01
(000)	(100)	4 0	4 2	3717.53	315.91	.212635E+02	.328870E+01
(000)	(001)	7 -1	7 -2	3717.56	842.97	.124792E+03	.805335E+02
(000)	(020)	9 -6	10 -4	3717.56	1080.65	.749156E-01	.453330E+00
(010)	(110)	3 0	4 -2	3717.82	1813.87	.501589E-02	.102089E+01
(000)	(001)	5 -1	5 -2	3718.13	446.64	.599156E+03	.578049E+02
(010)	(110)	3 -2	4 -4	3718.42	1739.52	.200061E-01	.285037E+01
(010)	(110)	4 1	5 -1	3718.71	2005.19	.354080E-02	.601039E+00
(000)	(020)	5 -4	6 2	3718.76	326.63	.186143E+00	.302981E-01

(000)	(100)	7 1	8 -3	3718.81	933.15	.158759E+00	.157822E+00
(000)	(100)	9 -1	10 -5	3719.03	1362.21	.373519E+00	.290515E+01
(000)	(100)	8 -8	7 -2	3719.15	744.03	.260667E-01	.313894E-01
(000)	(020)	6 -3	6 3	3719.65	553.13	.886726E+00	.142491E+00
(000)	(001)	9 -1	9 -2	3720.03	1362.21	.165174E+02	.128434E+03
(010)	(110)	3 -2	3 0	3720.71	1739.52	.106995E-01	.152348E+01
(000)	(100)	8 -4	7 2	3720.78	982.95	.475921E-02	.180117E-01
(000)	(020)	8 -1	9 1	3721.16	1124.98	.129161E+01	.321917E+01
(000)	(001)	9 -7	8 -2	3721.23	1079.23	.740578E-01	.148220E+00
(000)	(100)	9 -3	9 -1	3721.28	1283.24	.169389E+01	.901641E+01
(000)	(100)	3 0	4 -2	3721.87	206.41	.127358E+02	.116384E+01
(000)	(001)	3 -1	3 -2	3722.18	173.37	.815160E+03	.211910E+02
(000)	(100)	10 -4	10 -2	3722.93	1538.38	.184784E+00	.100238E+02
(010)	(110)	5 -3	5 -1	3723.05	2000.85	.371047E-01	.616150E+01
(000)	(100)	3 1	3 3	3723.73	212.26	.516433E+02	.161706E+01
(000)	(100)	8 2	9 -2	3723.96	1260.01	.682828E-01	.974757E+00
(000)	(100)	9 3	10 -1	3724.84	1638.83	.283168E-01	.834253E+00
(000)	(100)	5 -5	5 -3	3725.14	325.33	.502491E+02	.270474E+01
(000)	(100)	8 -2	8 0	3725.40	1050.64	.136813E+01	.715426E+01
(000)	(110)	9 8	8 -8	3725.47	2238.53	.254022E-10	.395275E-07
(000)	(100)	7 -5	7 -3	3725.51	704.23	.159656E+02	.528619E+01
(000)	(100)	8 7	9 5	3726.41	1798.24	.147969E-03	.929247E-02
(000)	(020)	8 7	9 5	3726.41	1798.24	.342088E-02	.214832E+00
(000)	(100)	2 -2	3 -2	3726.55	70.08	.623569E+02	.296019E+01
(000)	(100)	9 -5	9 -3	3726.69	1202.07	.207454E+01	.747163E+01
(000)	(100)	4 -3	4 -1	3727.07	224.85	.668342E+02	.222094E+01
(000)	(020)	7 -4	7 2	3727.66	709.84	.264246E+00	.269474E+00
(000)	(020)	10-10	9 0	3728.25	1114.46	.111880E-02	.793876E-02
(000)	(100)	8 0	9 -4	3728.57	1133.84	.135552E-02	.105542E-01
(010)	(110)	3 -3	4 -3	3728.58	1731.69	.581823E-01	.265665E+01
(000)	(001)	8 0	8 -1	3729.28	1133.84	.184497E+02	.143623E+03
(000)	(001)	10 0	10 -1	3729.35	1729.71	.149016E+01	.201962E+03
(000)	(100)	3 0	3 2	3729.36	206.41	.160814E+02	.146663E+01
(000)	(020)	9 -1	10 -1	3729.95	1362.21	.616070E-01	.477762E+00
(000)	(001)	10 2	10 1	3730.31	1884.06	.102700E+01	.291678E+03
(000)	(001)	5 -3	4 2	3730.50	399.43	.103972E+02	.797245E+00
(000)	(001)	9 3	9 2	3730.79	1638.83	.123139E+02	.359665E+03
(000)	(001)	9 3	10 -2	3730.90	1638.83	.207497E-01	.606041E+00
(000)	(100)	6 1	7 -1	3731.01	758.34	.103805E+01	.444846E+00
(000)	(001)	6 -2	7 -7	3731.06	602.86	.838858E-02	.523614E-02
(000)	(001)	9 2	9 3	3731.14	1638.69	.410581E+01	.359450E+03
(000)	(001)	6 0	6 -1	3731.16	662.20	.142459E+03	.115502E+03
(000)	(001)	9 1	9 0	3731.21	1481.97	.157323E+02	.216576E+03
(000)	(100)	9 2	10 0	3731.53	1638.69	.912462E-03	.798043E+00
(000)	(100)	4 -1	4 1	3731.53	300.52	.528485E+02	.252129E+01
(000)	(001)	10 1	10 2	3731.55	1883.60	.307939E+01	.290787E+03
(000)	(100)	10 -9	9 -5	3731.74	1114.48	.140723E-01	.332566E-01
(000)	(100)	9 -9	8 -3	3731.84	920.12	.380287E-01	.279456E-01
(000)	(001)	1 -1	0 0	3732.13	23.79	.197968E+04	.250535E+02
(000)	(001)	8 2	8 1	3732.54	1260.01	.193788E+02	.275931E+03
(000)	(001)	8 4	8 3	3732.62	1417.81	.120156E+02	.364684E+03
(000)	(001)	8 3	8 4	3732.68	1417.79	.360282E+02	.364454E+03
(000)	(100)	7 -1	7 1	3732.95	842.97	.812746E+01	.522335E+01
(000)	(100)	3 -2	4 -4	3732.96	142.29	.538667E+02	.360890E+01
(000)	(001)	10 4	10 3	3733.36	2066.51	.650646E+00	.442842E+03
(000)	(001)	10 3	10 4	3733.43	2066.48	.195211E+01	.442808E+03
(000)	(001)	4 0	4 -1	3734.07	315.91	.411718E+03	.633961E+02
(000)	(001)	7 3	7 2	3734.08	1063.23	.153580E+03	.283697E+03
(000)	(001)	8 1	8 2	3734.32	1259.29	.581413E+02	.274943E+03
(000)	(001)	7 2	7 3	3734.53	1063.04	.512188E+02	.283546E+03
(000)	(001)	7 1	7 0	3734.74	933.15	.195287E+03	.193306E+03
(000)	(001)	7 5	7 4	3735.44	1221.06	.119613E+03	.470760E+03
(000)	(001)	7 4	7 5	3735.46	1221.05	.398728E+02	.470755E+03
(000)	(100)	5 -3	4 3	3735.71	399.43	.357279E-01	.273575E-02
(010)	(110)	3 1	3 3	3735.91	1819.41	.192831E-01	.133695E+01
(000)	(100)	5 -2	5 0	3736.06	416.40	.126916E+02	.316230E+01

(000)	(001)	6 4	6 3	3736.08	891.26	.156051E+03	.378943E+03
(000)	(001)	9 5	9 4	3736.13	1820.70	.637598E+01	.444780E+03
(000)	(001)	9 4	9 5	3736.14	1820.70	.212707E+01	.445144E+03
(000)	(001)	6 3	6 4	3736.16	891.23	.468178E+03	.378901E+03
(010)	(110)	4 -3	4 -1	3736.17	1821.67	.237363E-01	.166352E+01
(000)	(001)	9 0	9 1	3736.86	1479.75	.524326E+01	.213924E+03
(010)	(110)	4 -3	5 -5	3737.00	1821.67	.444744E-01	.311622E+01
(000)	(020)	9 7	10 3	3737.08	2022.04	.196506E-03	.359852E-01
(000)	(020)	9 6	10 4	3737.09	2022.04	.655326E-04	.360019E-01
(010)	(110)	5 -5	4 1	3737.17	1920.83	.128216E-04	.144519E-02
(000)	(001)	7 3	8 -2	3737.23	1063.23	.679110E+00	.125342E+01
(010)	(110)	4 -4	3 2	3737.45	1817.47	.375465E-05	.773410E-03
(010)	(110)	4 0	4 2	3737.56	1923.05	.843686E-02	.288312E+01
(000)	(001)	6 2	6 1	3737.83	759.38	.158364E+03	.204240E+03
(000)	(001)	2 0	2 -1	3738.38	95.18	.732309E+03	.417546E+02
(000)	(001)	3 3	3 4	3738.42	743.96	.857161E+03	.342174E+03
(000)	(001)	3 4	3 5	3738.44	743.95	.285741E+03	.342181E+03
(000)	(001)	6 5	6 6	3738.90	1048.63	.246504E+03	.424016E+03
(000)	(001)	6 6	6 5	3738.90	1048.63	.821857E+02	.424107E+03
(000)	(100)	5 -4	5 -2	3739.63	326.63	.133957E+02	.216822E+01
(000)	(001)	5 1	5 0	3739.63	509.40	.988269E+03	.128081E+03
(000)	(001)	5 3	5 2	3739.86	611.56	.135418E+04	.286413E+03
(010)	(110)	5 -5	5 -3	3740.18	1920.83	.191420E-01	.215586E-01
(000)	(001)	8 5	8 6	3740.22	1598.74	.232977E+02	.560066E+03
(000)	(001)	8 6	8 5	3740.22	1598.74	.776592E+01	.560066E+03
(000)	(001)	6 1	6 2	3740.24	753.34	.476003E+03	.203483E+03
(000)	(001)	5 2	5 3	3740.38	611.33	.451574E+03	.286172E+03
(000)	(100)	6 0	6 2	3740.98	662.20	.452034E+01	.365534E+01
(010)	(110)	3 0	3 2	3741.05	1813.87	.573976E-02	.116097E+01
(000)	(100)	3 -3	4 -3	3741.07	136.75	.164612E+03	.357205E+01
(000)	(001)	4 -4	3 1	3741.15	222.03	.277385E-01	.271790E-02
(000)	(001)	5 -3	4 0	3741.33	325.33	.291606E+01	.156283E+00
(000)	(020)	8 -5	8 1	3741.52	865.85	.564852E+00	.444861E+00
(000)	(001)	4 4	4 3	3741.56	488.96	.738737E+03	.260275E+03
(000)	(001)	4 3	4 4	3741.62	488.94	.221691E+04	.260328E+03
(010)	(110)	5 -1	5 1	3741.63	2054.20	.228496E-01	.487603E+01
(000)	(001)	5 3	6 -2	3741.97	611.56	.126031E+01	.266407E+00
(000)	(020)	7 -2	6 6	3742.16	817.56	.157313E-03	.268705E-03
(010)	(110)	4 -4	5 -4	3742.27	1817.47	.142871E-01	.293917E+01
(000)	(001)	10 -8	9 -3	3742.29	1293.23	.218753E-02	.364404E-01
(000)	(100)	9 1	10 -3	3742.34	1481.97	.732693E-01	.103310E+01
(000)	(001)	3 3	4 -2	3742.69	285.70	.128401E+02	.568853E+00
(000)	(001)	7 0	7 1	3742.77	929.72	.653027E+02	.196348E+03
(000)	(100)	10 -4	9 2	3743.16	1538.33	.204243E-03	.110195E-01
(000)	(100)	6 -3	6 -1	3743.29	553.13	.212346E+02	.339071E+01
(000)	(001)	4 2	4 1	3744.07	384.29	.914193E+03	.194864E+03
(000)	(001)	10 -1	10 0	3744.12	1724.02	.445407E+01	.195067E+03
(000)	(001)	3 1	3 0	3744.53	212.26	.346179E+04	.107793E+03
(010)	(110)	6 -6	5 0	3744.69	2041.91	.165955E-03	.100081E-02
(000)	(001)	7 7	7 6	3745.15	1400.82	.542396E+02	.504118E+03
(000)	(001)	7 6	7 7	3745.15	1400.82	.180864E+02	.504299E+03
(010)	(110)	8 -7	7 -3	3745.17	2337.94	.704818E-06	.585738E-03
(010)	(110)	1 1	2 1	3745.22	1640.48	.453830E-01	.133093E+01
(000)	(100)	8 1	9 -1	3745.23	1259.29	.193766E+00	.913626E+00
(000)	(100)	6 -6	6 -4	3745.25	446.67	.769162E+01	.221040E+01
(000)	(100)	8 -6	8 -4	3745.66	892.98	.178631E+01	.415825E+01
(000)	(100)	10 -6	10 -4	3745.66	1438.35	.175186E+00	.584692E+01
(010)	(110)	6 -4	6 -2	3745.74	2146.31	.572202E-02	.569098E+01
(000)	(001)	3 3	3 2	3746.18	285.70	.407323E+04	.180288E+03
(000)	(100)	1 1	2 1	3746.35	42.37	.132129E+03	.182100E+01
(000)	(001)	3 2	3 3	3746.62	285.50	.135757E+04	.180072E+03
(000)	(001)	8 -2	7 3	3746.93	1050.64	.613392E-01	.318913E+00
(000)	(001)	10 6	10 5	3746.97	2269.59	.291358E+00	.523158E+03
(000)	(001)	10 5	10 6	3746.97	2269.59	.873149E+00	.522605E+03
(000)	(001)	4 1	4 2	3746.97	382.96	.274967E+04	.193975E+03
(000)	(100)	5 0	6 -2	3747.15	504.58	.233964E+01	.887095E+00

(000)	(100)	5 1	5 3	3747.16	509.40	.186090E+02	.240691E+01
(000)	(020)	8 -6	9 -2	3747.18	882.98	.167718E+00	.390263E+00
(000)	(100)	10-10	9 -4	3747.95	1114.46	.314346E-02	.221880E-01
(000)	(001)	6 -2	5 3	3748.85	602.86	.989748E-02	.600900E-02
(000)	(001)	1 1	1 0	3749.34	42.37	.272900E+04	.375810E+02
(000)	(001)	5 -1	6 -6	3749.57	446.64	.206588E+01	.197639E+00
(010)	(110)	4 -1	4 1	3749.81	1908.19	.190850E-01	.201785E+01
(000)	(001)	2 2	2 1	3749.87	136.22	.161043E+04	.104326E+03
(000)	(100)	4 -1	5 -3	3749.95	300.52	.368828E+02	.175096E+01
(000)	(001)	8 -1	8 0	3750.17	1124.98	.559883E+02	.138464E+03
(000)	(001)	5 0	5 1	3750.22	504.58	.332698E+03	.126042E+03
(000)	(100)	7 -3	6 3	3750.59	782.45	.823643E-02	.394151E-02
(000)	(001)	6 -6	5 -1	3750.67	446.67	.165769E+00	.475695E-01
(000)	(001)	3 -3	2 2	3750.72	136.75	.544804E+02	.117917E+01
(000)	(100)	4 2	4 4	3750.88	384.29	.593008E+01	.126172E+01
(010)	(110)	6 -2	6 0	3751.06	2211.51	.509305E-02	.691462E+01
(000)	(001)	9 -3	10 -8	3751.30	1263.24	.660579E+00	.348807E+01
(000)	(001)	10 -2	9 3	3751.70	1618.13	.432848E-03	.341530E-01
(000)	(100)	5 0	5 2	3751.74	504.58	.598062E+01	.226483E+01
(000)	(100)	4 -3	5 -5	3751.97	224.83	.124408E+03	.410671E+01
(000)	(100)	10 -2	10 0	3752.09	1618.13	.734495E-01	.579477E+01
(000)	(100)	4 1	4 3	3752.13	382.96	.176176E+02	.124110E+01
(000)	(100)	6 -1	6 1	3752.30	649.73	.122752E+02	.310732E+01
(000)	(001)	2 1	2 2	3752.51	134.96	.486574E+04	.104364E+03
(000)	(001)	9 6	9 7	3752.68	2022.04	.117889E+01	.644961E+03
(000)	(001)	9 7	9 6	3752.68	2022.04	.353667E+01	.644961E+03
(010)	(110)	4 -1	5 -3	3752.82	1908.19	.137394E-01	.145150E+01
(010)	(110)	1 0	2 2	3752.83	1634.96	.115487E-01	.987080E+00
(000)	(100)	1 0	2 2	3752.87	37.14	.854531E+02	.142705E+01
(000)	(100)	7 -4	7 -2	3753.34	709.84	.321756E+01	.325877E+01
(010)	(110)	5 -4	6 -6	3753.49	1922.94	.912212E-02	.310243E+01
(000)	(020)	9 -2	10 0	3753.53	1343.40	.140101E+00	.295963E+01
(000)	(100)	6 -5	6 -3	3754.04	447.23	.205901E+02	.197324E+01
(010)	(110)	5 -4	5 -2	3754.27	1922.94	.468378E-02	.159262E+01
(000)	(100)	7 -2	7 0	3754.60	817.56	.219448E+01	.372403E+01
(000)	(001)	2 2	3 -3	3754.74	136.22	.105452E+02	.682290E+00
(000)	(100)	4 -4	5 -4	3755.96	222.03	.412084E+02	.402130E+01
(010)	(110)	5 -5	6 -5	3756.04	1920.83	.267312E-01	.299789E+01
(000)	(001)	4 -2	3 3	3756.63	275.49	.194477E+01	.245215E+00
(000)	(001)	3 0	3 1	3756.77	206.41	.117713E+04	.106571E+03
(000)	(020)	9 -8	10 -6	3757.04	920.16	.552532E-01	.153255E+00
(000)	(001)	6 -1	6 0	3758.32	649.73	.441738E+03	.111635E+03
(010)	(110)	7 -7	6 -1	3758.87	2180.84	.528287E-06	.205954E-03
(000)	(100)	8 -3	3 -1	3759.26	1007.08	.289363E+01	.405622E+01
(000)	(001)	8 8	8 7	3759.47	1798.24	.311095E+01	.589951E+03
(000)	(001)	8 7	8 8	3759.47	1798.24	.932842E+01	.589674E+03
(000)	(100)	9 -1	9 1	3759.48	1362.21	.573127E+00	.444816E+01
(010)	(110)	7 -5	6 1	3759.67	2309.89	.422799E-06	.305963E-03
(000)	(001)	1 0	1 1	3759.86	37.14	.983089E+03	.375811E+02
(010)	(110)	6 1	7 -1	3760.30	2399.96	.587369E-03	.654531E+00
(000)	(001)	4 0	5 -5	3760.69	313.91	.828008E+00	.501490E-01
(000)	(020)	9 -6	9 0	3762.06	1080.65	.131254E+00	.784850E+00
(010)	(110)	5 -2	5 0	3762.17	2024.43	.466953E-02	.257759E+01
(000)	(001)	3 1	4 -4	3762.63	212.26	.983184E+01	.305292E+00
(000)	(020)	10 -9	10 -3	3762.98	1114.48	.209445E-01	.490865E-01
(000)	(100)	2 0	3 0	3763.95	95.18	.318380E+02	.168776E+01
(000)	(001)	9 -2	9 -1	3764.31	1343.40	.569488E+01	.119960E+03
(000)	(100)	7 -7	7 -5	3764.94	586.22	.980413E+01	.182413E+01
(010)	(110)	5 0	6 -2	3764.95	2127.10	.909630E-03	.820879E+00
(000)	(001)	10 -5	9 0	3765.93	1447.25	.472468E-02	.545592E-01
(000)	(100)	8 0	8 2	3766.09	1133.84	.441322E+00	.340193E+01
(000)	(100)	8 -5	8 -3	3766.11	883.85	.362884E+01	.283931E+01
(000)	(001)	4 -1	4 0	3766.14	300.52	.131991E+04	.623916E+02
(010)	(110)	6 -6	6 -4	3766.28	2041.91	.278394E-02	.166926E+01
(010)	(110)	6 -4	5 2	3766.42	2146.31	.152958E-06	.151293E-03
(010)	(110)	2 0	3 0	3766.61	1693.62	.105390E-01	.119176E+01

(000)	(100)	9 -4	9 -2	3766.70	1217.27	.354924E+00	.408099E+01
(000)	(100)	7 0	8 -2	3766.72	929.72	.179630E+00	.520267E+00
(000)	(001)	4 2	5 -3	3766.82	384.29	.113096E+02	.239612E+01
(000)	(100)	9 -7	9 -5	3766.99	1079.23	.164944E+01	.326111E+01
(010)	(110)	7 -3	7 -1	3767.25	2393.01	.762648E-02	.820482E+01
(000)	(001)	7 -7	6 -2	3767.31	586.22	.195065E+01	.362704E+00
(000)	(020)	6 -5	7 1	3768.48	447.25	.903329E+00	.862382E-01
(010)	(110)	6 -5	7 -7	3768.57	2042.91	.143632E-01	.288279E+01
(000)	(100)	10 2	10 4	3769.31	1884.06	.189797E-01	.533465E+01
(000)	(100)	3 -4	6 -6	3769.68	326.63	.264480E+02	.424675E+01
(000)	(100)	10 1	10 3	3769.74	1883.60	.568692E-01	.531577E+01
(010)	(110)	6 -6	7 -6	3769.75	2041.91	.472657E-02	.283147E+01
(000)	(100)	7 -6	7 -4	3769.78	586.46	.307758E+01	.171759E+01
(000)	(001)	2 -1	2 0	3769.93	79.50	.255160E+04	.417558E+02
(000)	(100)	7 1	7 3	3770.79	933.15	.259731E+01	.254638E+01
(000)	(100)	5 -5	6 -5	3771.47	325.33	.789165E+02	.419573E+01
(000)	(001)	8 -2	9 -7	3771.67	1050.64	.835411E+00	.441801E+01
(000)	(020)	9 -9	10 -5	3772.24	920.12	.104900E+00	.170231E+00
(000)	(020)	9 2	9 4	3772.65	1638.69	.127074E-02	.110038E+00
(000)	(100)	9 2	9 4	3772.65	1638.69	.489666E-01	.424021E+01
(000)	(001)	7 -2	7 -1	3773.02	317.56	.453102E+02	.765177E+02
(010)	(110)	7 -5	7 -3	3773.22	2309.89	.646848E-02	.466417E+01
(000)	(001)	6 2	7 -3	3773.48	759.38	.985965E+00	.125957E+01
(000)	(100)	6 2	6 4	3773.69	759.38	.137427E+01	.175554E+01
(000)	(100)	7 0	7 2	3774.01	929.72	.844648E+00	.244165E+01
(010)	(110)	6 -3	6 -3	3774.09	2042.91	.702572E-02	.140805E+01
(000)	(100)	8 -1	8 1	3774.13	1124.98	.124127E+01	.305027E+01
(000)	(100)	6 1	6 3	3774.70	758.34	.409181E+01	.173321E+01
(000)	(100)	8 4	8 6	3775.12	1417.61	.100343E+00	.301121E+01
(000)	(100)	8 3	8 5	3775.14	1417.79	.300989E+00	.301050E+01
(000)	(001)	9 -4	8 1	3775.28	1217.27	.316279E-03	.362837E-02
(000)	(100)	5 3	5 5	3775.41	611.56	.446279E+01	.935003E+00
(000)	(001)	8 2	9 -3	3775.51	1260.01	.253613E+00	.357097E+01
(000)	(100)	5 -2	6 -4	3775.52	416.40	.871030E+01	.214774E+01
(000)	(100)	5 2	5 4	3775.63	611.33	.148518E+01	.932401E+00
(000)	(100)	9 -2	9 0	3775.75	1343.40	.167437E+00	.351630E+01
(010)	(110)	4 2	4 4	3776.33	2006.30	.216226E-02	.109009E+01
(000)	(100)	10 -5	10 -3	3777.06	1447.25	.382618E+00	.382960E+01
(000)	(100)	7 5	7 7	3777.13	1221.06	.414266E+00	.161242E+01
(000)	(100)	7 4	7 6	3777.14	1221.05	.138091E+00	.161237E+01
(010)	(110)	4 1	4 3	3777.37	2005.19	.634478E-02	.106028E+01
(010)	(110)	6 -3	6 -1	3778.04	2161.67	.796937E-02	.281966E+01
(010)	(110)	8 -8	7 -2	3778.22	2337.73	.177370E-07	.439132E-04
(000)	(100)	3 -1	4 -1	3778.55	173.37	.654563E+02	.167623E+01
(000)	(100)	9 -3	8 3	3778.57	1283.24	.646934E-03	.234318E-02
(000)	(001)	0 0	1 -1	3779.49	0.00	.749031E+03	.250540E+02
(000)	(100)	10 -3	10 -1	3779.63	1584.04	.170306E+00	.378910E+01
(000)	(100)	6 -1	7 -3	3780.01	649.73	.424915E+01	.106773E+01
(000)	(001)	5 -2	5 -1	3780.94	416.40	.229008E+03	.563833E+02
(000)	(100)	9 0	10 -2	3781.56	1479.75	.232842E-01	.938763E+00
(010)	(110)	5 -3	4 3	3781.71	2000.85	.122239E-06	.199838E-04
(000)	(100)	9 -6	9 -4	3781.76	1080.65	.354864E+00	.211090E+01
(000)	(001)	8 -3	7 0	3782.04	883.85	.222610E+00	.173443E+00
(010)	(110)	5 1	5 3	3782.09	2131.19	.714936E-02	.218325E+01
(000)	(001)	9 -6	8 -1	3782.47	1080.65	.206752E-01	.122963E+00
(010)	(110)	7 -6	8 -8	3782.69	2181.31	.215539E-02	.251063E+01
(010)	(110)	7 -7	8 -7	3783.23	2180.84	.642276E-02	.248781E+01
(000)	(001)	5 1	6 -4	3783.38	509.40	.386320E+02	.494886E+01
(010)	(110)	5 -2	6 -4	3783.76	2024.43	.299276E-02	.164258E+01
(000)	(100)	8 -8	8 -6	3783.85	744.03	.126710E+01	.149974E+01
(000)	(001)	5 -1	4 4	3783.92	446.64	.556436E+01	.527501E+00
(000)	(100)	6 -2	5 4	3784.10	602.86	.760373E-03	.457340E-03
(000)	(001)	9 9	9 8	3784.21	2238.53	.127651E+01	.651635E+03
(000)	(001)	9 8	9 9	3784.21	2238.53	.625749E+00	.652211E+03
(000)	(001)	7 -1	6 4	3784.42	842.97	.251517E+00	.159446E+00
(000)	(001)	3 -2	3 -1	3784.78	142.29	.318884E+03	.210716E+02

(000)	(001)	7 -1	8 -6	3783.44	842.97	.878526E+01	.556781E+01
(010)	(110)	3 -1	4 -1	3785.46	1772.38	.208173E-01	.113686E+01
(000)	(001)	10 -3	9 2	3785.58	1584.04	.152466E-01	.837484E+00
(000)	(100)	2 -1	3 1	3785.62	79.50	.466393E+02	.760066E+00
(010)	(110)	5 0	5 2	3785.63	2127.10	.220704E-02	.198082E+01
(000)	(001)	10 -3	10 -2	3785.69	1584.04	.399944E+01	.885250E+02
(000)	(100)	8 -7	8 -5	3786.41	744.13	.366816E+01	.144693E+01
(000)	(100)	6 -5	7 -7	3786.74	447.25	.428563E+02	.407164E+01
(000)	(100)	10 -7	10 -5	3787.32	1293.92	.307211E+00	.169117E+01
(000)	(001)	7 -4	6 1	3787.37	709.84	.180533E+00	.181202E+00
(000)	(100)	6 -6	7 -6	3787.44	446.67	.144256E+02	.409942E+01
(000)	(100)	10 -8	10 -6	3788.01	1293.23	.154982E+00	.255056E+01
(000)	(001)	9 -1	8 4	3788.26	1362.21	.217702E-02	.166230E-01
(000)	(001)	10 -7	9 -2	3788.32	1293.92	.117458E-01	.646425E-01
(010)	(110)	6 0	6 2	3788.45	2283.60	.185025E-02	.351423E+01
(000)	(001)	8 -8	7 -3	3788.83	744.03	.230180E+00	.272084E+00
(000)	(001)	6 0	7 -5	3789.74	662.20	.771215E+01	.615613E+01
(000)	(001)	8 -3	7 2	3790.23	1007.08	.912446E-01	.126859E+00
(000)	(100)	4 -2	5 -2	3790.77	275.49	.140263E+02	.175264E+01
(010)	(110)	7 -7	7 -5	3790.89	2180.84	.334226E-02	.129198E+01
(010)	(110)	2 -1	3 1	3792.67	1677.07	.128019E-01	.441837E+00
(000)	(020)	10 -2	9 4	3793.21	1618.13	.342569E-04	.267339E-02
(000)	(100)	10 -2	9 4	3793.21	1618.13	.822126E-04	.641582E-02
(000)	(001)	8 -3	8 -2	3793.38	1007.08	.498431E+02	.692404E+02
(010)	(110)	7 -6	7 -4	3794.62	2181.31	.101542E-02	.117899E+01
(010)	(110)	8 -7	9 -9	3796.14	2337.94	.248169E-02	.203486E+01
(010)	(110)	8 -8	9 -8	3796.39	2337.73	.824315E-03	.202535E+01
(000)	(001)	1 0	2 -1	3796.42	37.14	.944484E+03	.375811E+02
(010)	(110)	6 -1	6 1	3796.82	2272.74	.460823E-02	.276337E+01
(000)	(100)	10 0	10 2	3796.92	1729.71	.170696E-01	.227227E+01
(010)	(110)	7 -4	7 -2	3796.92	2319.03	.123715E-02	.277861E+01
(000)	(100)	6 -3	7 -5	3798.03	553.13	.144352E+02	.227176E+01
(000)	(020)	9 -7	10 -3	3798.23	1079.23	.222600E+00	.436482E+00
(000)	(020)	10 -7	10 -1	3798.24	1293.92	.136529E+00	.749418E+00
(000)	(001)	6 -3	5 2	3798.29	553.13	.328909E+00	.130447E+00
(000)	(100)	3 -3	3 3	3799.24	136.75	.590456E+00	.126166E-01
(000)	(001)	7 1	8 -4	3799.36	933.15	.509605E+01	.487100E+01
(000)	(100)	2 2	3 2	3799.55	136.22	.269467E+02	.172283E+01
(000)	(100)	9 1	9 3	3799.71	1481.97	.130383E+00	.176253E+01

(000)	(001)	6 -3	6 -2	3800.40	553.13	.253764E+03	.402261E+02
(000)	(100)	2 1	3 3	3801.03	134.96	.791100E+02	.167515E+01
(000)	(001)	1 -1	2 -2	3801.46	23.79	.649732E+04	.807284E+02
(000)	(001)	5 -4	4 1	3801.73	326.63	.259240E+01	.412752E+00
(010)	(110)	4 -2	5 -2	3801.77	1675.44	.425824E-02	.113861E+01
(000)	(001)	6 -5	5 0	3801.78	447.25	.121105E+02	.114603E+01
(000)	(100)	9 0	9 2	3801.79	1479.75	.424939E-01	.170421E+01
(000)	(100)	8 2	8 4	3801.83	1260.01	.926009E-01	.129483E+01
(000)	(100)	5 -3	6 -3	3801.86	399.43	.249550E+02	.187766E+01
(000)	(100)	10 -1	10 1	3802.09	1724.02	.484392E-01	.208869E+01
(000)	(100)	9 -9	9 -7	3802.24	920.12	.133110E+01	.121582E+01
(000)	(100)	8 1	8 3	3802.52	1259.29	.275687E+00	.128031E+01
(000)	(100)	7 -6	8 -8	3803.21	586.46	.691241E+01	.382387E+01
(000)	(001)	4 -3	4 -2	3803.54	224.85	.767828E+03	.250024E+02
(000)	(100)	7 3	7 5	3803.61	1063.23	.468263E+00	.849180E+00
(000)	(100)	7 -7	8 -7	3803.65	586.22	.205352E+02	.378183E+01
(000)	(100)	9 -8	9 -6	3803.66	920.16	.431826E+00	.118307E+01
(000)	(100)	8 -1	9 -3	3803.78	1124.98	.207212E+00	.505230E+00
(000)	(100)	7 2	7 4	3803.79	1063.04	.155770E+00	.846635E+00
(000)	(100)	6 4	6 6	3805.25	891.26	.175835E+00	.419224E+00
(000)	(100)	6 3	6 5	3805.28	891.23	.527278E+00	.418980E+00
(000)	(100)	8 6	8 8	3806.48	1598.74	.158059E-01	.112006E+01
(000)	(100)	8 5	8 7	3806.48	1598.74	.474169E-01	.112004E+01
(000)	(001)	7 -6	6 -1	3806.90	586.46	.768495E+00	.424712E+00
(000)	(001)	9 -2	8 3	3807.03	1343.40	.125068E-01	.260493E+00
(000)	(001)	4 -3	3 2	3807.03	224.85	.100139E+03	.325780E+01
(000)	(001)	1 1	2 0	3807.06	42.37	.554203E+04	.751619E+02
(000)	(020)	5 -5	5 5	3807.33	325.33	.866949E-02	.456576E-03
(000)	(100)	5 -4	4 4	3808.54	326.63	.112727E-02	.179159E-03
(000)	(100)	9 5	9 7	3808.83	1820.70	.297174E-01	.203348E+01
(000)	(100)	9 4	9 6	3808.83	1820.70	.990527E-02	.203337E+01
(000)	(100)	6 -5	5 3	3809.31	447.25	.573665E-02	.543680E-03
(000)	(001)	7 -2	6 3	3809.78	817.56	.292578E-01	.489325E-01
(010)	(110)	6 -3	7 -5	3810.06	2161.67	.452923E-02	.158903E+01
(010)	(110)	6 -1	7 -3	3810.37	2272.74	.150897E-02	.901652E+00
(000)	(001)	9 1	10 -4	3810.89	1481.97	.637610E+00	.659421E+01
(000)	(100)	7 -2	8 -4	3811.08	817.56	.661151E+00	.110537E+01
(000)	(100)	4 -4	4 2	3811.43	222.03	.321047E+00	.308770E-01
(010)	(110)	2 2	3 2	3811.43	1743.49	.820833E-02	.116290E+01
(000)	(100)	10 4	10 6	3811.63	2066.51	.417379E-02	.278243E+01
(000)	(100)	10 3	10 5	3811.66	2066.43	.125204E-01	.278178E+01
(000)	(001)	9 -9	8 -4	3812.39	920.12	.808713E+00	.736710E+00
(010)	(110)	2 1	3 3	3813.01	1742.31	.236863E-01	.111177E+01
(000)	(100)	6 -4	7 -4	3813.35	542.69	.430464E+01	.196302E+01
(010)	(110)	5 3	5 5	3813.81	2252.71	.178328E-02	.967109E+00
(010)	(110)	5 2	5 4	3813.97	2252.54	.592113E-03	.962522E+00
(010)	(110)	8 -8	8 -6	3813.98	2337.73	.406066E-03	.993109E+00
(000)	(001)	5 -2	4 3	3814.12	416.40	.211106E+00	.515237E-01
(000)	(020)	5 5	6 5	3815.76	743.96	.105702E+02	.413406E+01
(000)	(020)	5 4	6 6	3815.77	743.93	.352350E+01	.413395E+01
(010)	(110)	8 -7	8 -5	3815.87	2337.94	.116022E-02	.946328E+00
[redacted]	(001)	2 -2	2 1	3816.01	70.08	.110340E+01	.511522E-01
(000)	(001)	2 -1	3 -2	3816.05	79.50	.635601E+04	.102756E+03
(010)	(110)	5 -3	6 -3	3816.15	2000.85	.723615E-02	.117230E+01
(000)	(100)	8 -2	7 4	3816.19	1050.64	.619792E-04	.316392E-03
(000)	(001)	8 0	9 -5	3816.20	1133.84	.104425E+01	.794392E+01
(000)	(001)	8 -7	7 -2	3816.40	744.13	.246397E+01	.964292E+00

(000)	(020)	4 0	5 4	3816.71	315.91	.159962E+00	.240976E-01
(000)	(100)	7 -6	6 2	3816.72	586.46	.157524E-02	.858325E-03
(000)	(100)	7 -4	8 -6	3818.04	709.84	.216128E+01	.215187E+01
(000)	(100)	8 -3	7 3	3818.09	885.85	.191116E-02	.147499E-02
(000)	(001)	9 -4	9 -3	3818.25	1217.27	.473145E+01	.536686E+02
(000)	(100)	9 -6	8 2	3819.28	1080.65	.428994E-03	.252680E-02
(000)	(100)	3 1	4 1	3819.79	212.26	.414937E+02	.126658E+01
(000)	(100)	8 -7	9 -9	3819.86	744.13	.849676E+01	.332226E+01
(000)	(001)	3 -3	3 0	3820.04	136.75	.428376E+03	.910775E+01
(000)	(100)	8 -8	9 -8	3820.05	744.03	.281315E+01	.329810E+01
(000)	(001)	6 0	3 3	3820.19	662.20	.615958E-01	.467762E-01
(000)	(100)	10-10	10 -8	3820.51	1114.46	.139110E+00	.963257E+00
(000)	(020)	10 -4	10 2	3820.55	1538.38	.616302E-03	.325777E-01
(000)	(001)	2 -2	3 -3	3820.88	70.08	.237710E+04	.110059E+03
(000)	(100)	10 -9	10 -7	3821.49	1114.48	.403521E+00	.931233E+00
(000)	(001)	2 1	3 0	3821.83	134.96	.396503E+04	.835022E+02
(000)	(001)	9 -1	10 -6	3822.10	1362.21	.135249E+01	.102354E+02
(000)	(001)	8 0	7 3	3822.67	1133.84	.177643E-02	.134909E-01
(000)	(001)	7 -4	7 -3	3823.02	709.84	.429321E+02	.417945E+02
(000)	(100)	7 -4	6 4	3823.23	709.84	.593582E-03	.590194E-03
(010)	(110)	3 -3	3 3	3823.43	1731.89	.327221E-04	.145705E-02
(010)	(110)	6 1	6 3	3823.69	2399.96	.167209E-02	.183239E+01
(000)	(100)	9 7	9 9	3823.77	2022.04	.504025E-02	.902072E+00
(000)	(100)	9 6	9 8	3823.77	2022.04	.168010E-02	.902083E+00
(000)	(001)	5 -4	5 -3	3824.48	326.63	.102690E+03	.162526E+02
(000)	(100)	3 -2	4 0	3825.33	142.29	.476660E+01	.311636E+00
(000)	(020)	5 -1	6 3	3826.14	446.64	.680876E+00	.638347E-01
(000)	(020)	6 -6	6 4	3826.29	446.67	.253450E-02	.726995E-03
(000)	(100)	7 -5	8 -5	3826.31	704.23	.592929E+01	.191145E+01
(000)	(001)	2 2	3 1	3826.96	136.22	.963730E+03	.611776E+02
(000)	(100)	3 0	4 2	3827.05	206.41	.121551E+02	.108025E+01
(000)	(001)	10 0	9 5	3827.13	1729.71	.255799E-02	.337827E+00
(000)	(100)	10 -7	9 1	3827.77	1293.92	.600516E-03	.327084E-02
(000)	(020)	10 -8	9 2	3827.82	1293.23	.633881E-04	.106491E-02
(000)	(001)	4 -4	4 -1	3827.95	222.03	.895841E+02	.771681E+01
(000)	(020)	7 -6	8 0	3828.36	586.46	.696522E-03	.382778E-03
(000)	(100)	10 6	10 8	3828.66	2269.59	.905661E-03	.159150E+01
(000)	(100)	10 5	10 7	3828.66	2269.59	.271696E-02	.159149E+01
(000)	(001)	9 -8	8 -8	3829.36	920.16	.213053E+00	.579785E+00
(010)	(110)	6 -4	7 -4	3829.82	2146.31	.121972E-02	.118647E+01
(000)	(020)	9 -7	8 8	3830.04	1079.23	.231019E-03	.546455E-03
(010)	(110)	7 -3	6 3	3830.64	2393.01	.256680E-06	.271575E-03
(000)	(100)	9 -1	8 5	3830.72	1362.21	.244385E-03	.184535E-02
(000)	(020)	6 4	7 4	3831.10	891.26	.152162E+01	.360335E+01
(000)	(020)	6 3	7 5	3831.14	891.23	.456411E+01	.360221E+01
(000)	(001)	8 -1	7 4	3831.52	1124.98	.596177E-01	.144309E+00
(000)	(100)	8 -7	7 1	3831.79	744.13	.241897E-02	.942879E-03
(000)	(001)	2 0	3 -1	3831.89	93.18	.254184E+04	.132330E+03
(000)	(020)	4 -1	5 5	3832.14	300.52	.273852E+00	.127219E-01
(000)	(100)	5 -5	5 1	3832.19	325.33	.588200E+00	.307764E-01
(000)	(001)	6 -1	5 4	3832.65	649.73	.425237E+01	.105387E+01
(010)	(110)	7 -4	8 -6	3832.68	2319.03	.617473E-03	.137389E+01
(000)	(001)	10 -1	9 4	3832.81	1724.02	.425911E-03	.182180E-01
(000)	(100)	6 -3	5 5	3833.84	553.13	.796024E-03	.124417E-03
(000)	(100)	10 -5	9 3	3834.43	1447.25	.113375E-03	.128584E-02
(000)	(020)	6 -2	7 2	3834.64	602.86	.221587E+00	.131521E+00
(000)	(001)	3 -2	4 -3	3834.75	142.29	.213641E+04	.139334E+03
(000)	(001)	10-10	9 -5	3835.58	1114.46	.864991E-01	.596603E+00
(000)	(100)	8 -5	9 -7	3836.51	883.85	.242385E+01	.186169E+01
(000)	(100)	4 0	5 0	3836.55	315.91	.630746E+01	.945277E+00
(000)	(100)	9 -8	10-10	3836.58	920.16	.999758E+00	.271553E+01
(000)	(100)	9 -9	10 -9	3836.68	920.12	.297722E+01	.269498E+01
(000)	(020)	9 -3	9 3	3837.93	1283.24	.440441E-02	.227317E-01
(000)	(001)	3 -3	4 -4	3838.14	136.75	.742460E+04	.157037E+03
(010)	(110)	3 1	4 1	3838.59	1819.41	.116549E-01	.786450E+00
(000)	(100)	8 -3	9 -5	3839.14	1007.08	.713053E+00	.979840E+00

(000)	(020)	8 -6	7 4	3839.38	882.98	.873201E-04	.198306E-03
(000)	(001)	5 -5	5 -2	3839.44	325.33	.363251E+03	.189705E+02
(000)	(100)	9 -2	10 -4	3840.61	1343.40	.190099E-01	.392478E+00
(000)	(100)	8 -6	9 -6	3840.84	882.98	.744112E+00	.168925E+01
(010)	(110)	3 -2	4 0	3842.70	1739.52	.955355E-03	.131712E+00
(000)	(001)	3 2	4 1	3842.86	285.50	.499805E+03	.646349E+02
(010)	(110)	4 -4	4 2	3843.14	1817.47	.103394E-04	.211128E-02
(000)	(001)	3 0	4 -1	3843.57	206.41	.168827E+04	.149394E+03
(010)	(110)	7 -5	8 -5	3843.92	2309.89	.157869E-02	.111740E+01
(000)	(001)	3 3	4 2	3844.23	285.70	.203727E+04	.878733E+02
(000)	(100)	9 -4	8 4	3844.57	1217.27	.373606E-04	.420878E-03
(000)	(001)	10 -9	9 -4	3844.81	1114.48	.473157E+00	.109678E+01
(000)	(020)	7 -3	8 1	3844.92	782.45	.541532E+00	.252790E+00
(000)	(001)	10 -5	10 -4	3845.52	1447.25	.493817E+01	.558443E+02
(000)	(001)	6 -5	6 -4	3845.53	447.25	.244707E+03	.228934E+02
(000)	(020)	7 3	8 3	3846.04	1063.23	.177739E+01	.318803E+01
(000)	(020)	7 2	8 4	3846.25	1063.04	.592082E+00	.318254E+01
(000)	(001)	8 -5	8 -4	3846.66	885.85	.456172E+02	.349448E+02
(010)	(110)	3 0	4 2	3846.74	1813.87	.309677E-02	.609560E+00
(000)	(100)	3 3	4 3	3849.44	285.70	.281124E+02	.121092E+01
(000)	(100)	9 -2	8 6	3849.53	1343.40	.868984E-04	.178995E-02
(000)	(001)	5 -3	5 0	3849.60	399.43	.951767E+02	.707224E+01
(000)	(100)	3 2	4 4	3849.67	285.50	.934068E+01	.120580E+01
(000)	(100)	5 -1	6 -1	3849.78	446.64	.789058E+01	.735229E+00
(000)	(001)	6 -4	6 -1	3850.47	542.89	.429888E+02	.190607E+02
(000)	(020)	7 -7	7 3	3851.82	536.22	.462412E-02	.840943E-03
(000)	(001)	4 -3	5 -4	3852.64	224.85	.606199E+04	.194878E+03
(000)	(001)	4 -2	4 1	3852.87	275.49	.355805E+02	.437426E+01
(000)	(100)	7 -1	6 5	3853.54	842.97	.290691E-04	.180975E-04
(000)	(001)	6 -6	6 -3	3853.57	446.67	.497902E+02	.139064E+02
(000)	(100)	9 -6	10 -8	3854.32	1080.65	.231135E+00	.146575E+01
(000)	(001)	7 1	6 6	3854.38	933.15	.816565E+00	.783193E+00
(000)	(001)	3 1	4 0	3854.40	212.26	.452116E+04	.136767E+03
(000)	(001)	4 -4	5 -5	3854.57	222.03	.198961E+04	.189212E+03
(010)	(110)	6 -2	5 4	3855.00	2211.51	.450330E-07	.594909E-04
(000)	(001)	3 -1	4 -2	3855.02	173.37	.728320E+04	.182811E+03
(000)	(020)	7 -5	6 5	3855.49	704.23	.115456E-03	.369385E-04
(000)	(100)	9 -8	8 0	3855.88	920.16	.285086E-03	.770472E-03
(000)	(001)	7 -5	7 -2	3856.30	704.23	.688794E+02	.220823E+02
(000)	(020)	5 -2	6 4	3856.56	416.40	.822930E-01	.198643E-01
(000)	(100)	9 -7	10 -7	3856.74	1079.23	.681216E+00	.131549E+01
(000)	(001)	9 1	8 6	3856.99	1481.97	.134800E-01	.179518E+00
(000)	(100)	4 -1	5 1	3857.00	300.52	.120849E+02	.557789E+00
(000)	(100)	5 -3	5 3	3857.13	399.43	.148426E+00	.110075E-01
(000)	(001)	7 0	6 5	3857.81	929.72	.164303E-01	.464647E-01
(000)	(001)	3 -1	3 2	3858.51	173.37	.357349E+00	.896148E-02
(000)	(020)	8 -2	8 4	3858.65	1050.64	.252497E-02	.127476E-01
(000)	(001)	9 0	8 5	3859.21	1479.75	.204884E-03	.809424E-02
(000)	(100)	4 -2	4 4	3859.68	275.49	.172520E-01	.211721E-02
(010)	(110)	5 -4	4 4	3859.69	1922.94	.508773E-07	.168272E-04
(000)	(100)	8 -3	7 5	3859.76	1007.08	.587595E-04	.802229E-04
(000)	(020)	8 -4	9 0	3859.76	982.95	.128619E+00	.469245E+00
(000)	(100)	6 -4	6 2	3860.29	542.89	.604137E-01	.267185E-01
(000)	(100)	6 -2	7 -2	3860.32	602.86	.100432E+01	.592137E+00
(000)	(020)	8 2	9 2	3861.04	1260.01	.207435E+00	.285606E+01
(000)	(020)	8 1	9 3	3861.88	1259.29	.620508E+00	.283738E+01
(000)	(001)	4 3	5 2	3862.48	488.94	.795482E+03	.904892E+02
(000)	(100)	6 -6	6 0	3862.71	446.67	.595616E-01	.165962E-01
(000)	(001)	4 4	5 3	3862.75	488.96	.202641E+03	.691554E+02
(010)	(110)	4 0	5 0	3863.55	1923.03	.163418E-02	.540236E+00
(000)	(001)	1 -1	2 2	3863.68	23.79	.569255E+03	.695880E+01
(000)	(100)	9 -4	10 -6	3863.97	1217.27	.653664E-01	.732675E+00
(000)	(001)	4 -1	5 -2	3864.25	300.52	.450674E+04	.207623E+03
(000)	(100)	8 0	7 6	3864.35	1133.84	.429075E-04	.322342E-03
(000)	(110)	10 6	9 -8	3864.53	2269.59	.282642E-08	.492070E-05
(000)	(001)	7 -6	7 -5	3865.48	586.46	.297917E+02	.162150E+02

(000)	(100)	2	-2	3	2	3865.69	70.08	.940012E-01	.430178E-02
(000)	(001)	4	1	5	0	3866.07	382.96	.207488E+04	.141863E+03
(000)	(001)	8	-6	8	-3	3866.54	882.98	.147557E+02	.332753E+02
(000)	(020)	10	4	9	6	3868.99	2066.51	.205299E-03	.134832E+00
(000)	(020)	10	3	9	7	3869.02	2066.48	.616117E-03	.134860E+00
(000)	(001)	7	-7	7	-4	3869.32	586.22	.123883E+03	.224275E+02
(000)	(001)	9	-6	9	-5	3869.39	1080.65	.698810E+01	.406272E+02
(000)	(100)	7	-3	8	-3	3869.51	782.45	.100004E+01	.463857E+00
(000)	(001)	5	-4	6	-5	3869.93	326.63	.147890E+04	.231316E+03
(010)	(110)	6	-5	5	3	3870.37	2042.91	.432750E-06	.845714E-04
(000)	(001)	4	2	3	1	3870.51	384.29	.775712E+03	.159944E+03
(000)	(001)	5	-5	6	-6	3870.88	325.33	.464575E+04	.240650E+03
(000)	(100)	7	-5	7	1	3871.69	704.23	.110008E+00	.350483E-01
(000)	(100)	4	2	5	2	3872.03	384.29	.361046E+01	.744150E+00
(000)	(100)	4	-3	5	-1	3872.15	224.85	.298475E+01	.954688E-01
(000)	(100)	8	-1	7	7	3873.21	1124.98	.134036E-03	.320952E-03
(000)	(100)	4	1	5	3	3873.60	382.96	.105286E+02	.718461E+00
(010)	(110)	3	3	4	3	3874.84	1907.72	.783165E-02	.799514E+00
(010)	(110)	5	-5	5	1	3875.00	1920.83	.316926E-05	.344518E-03
(010)	(110)	3	2	4	4	3875.07	1907.56	.259292E-02	.793459E+00
(000)	(020)	10	2	10	4	3875.07	1884.06	.145130E-03	.396786E-01
(000)	(020)	10	1	10	3	3875.52	1883.60	.451159E-03	.410204E-01
(000)	(001)	4	-2	5	-3	3875.62	275.49	.186546E+04	.227993E+03
(000)	(020)	9	1	10	1	3876.54	1481.97	.195145E+00	.258572E+01
(000)	(100)	7	-2	6	6	3878.95	817.56	.326552E-05	.536405E-05
(000)	(100)	9	-5	10	-5	3879.17	1202.07	.213842E+00	.739898E+00
(000)	(020)	9	0	10	2	3879.18	1479.75	.645332E-01	.253635E+01
(000)	(020)	7	-1	7	5	3879.40	642.97	.900322E-02	.556775E-02
(000)	(100)	8	-4	9	-4	3879.46	982.95	.753723E-01	.274313E+00
(000)	(001)	9	-7	9	-4	3880.06	1079.23	.164400E+02	.315563E+02
(000)	(001)	9	-5	9	-2	3880.17	1202.07	.799477E+01	.276550E+02
(000)	(001)	8	-4	8	-1	3880.17	982.95	.374331E+01	.135650E+02
(000)	(001)	4	0	5	-1	3881.43	315.91	.131734E+04	.195143E+03
(000)	(001)	5	4	6	3	3883.39	743.95	.624644E+02	.720104E+02
(000)	(001)	5	3	6	4	3883.43	743.96	.239108E+03	.918867E+02
(000)	(001)	5	-2	6	-3	3883.84	416.40	.109144E+04	.261600E+03
(000)	(001)	8	-7	8	-6	3884.28	744.13	.609533E+02	.234376E+02
(000)	(020)	8	-8	8	2	3884.68	744.03	.972750E-03	.112147E-02
(000)	(020)	6	-3	7	3	3884.91	553.13	.156738E+00	.241145E-01
(000)	(001)	7	-3	7	0	3885.44	782.45	.212893E+02	.983432E+01
(010)	(110)	5	-1	6	-1	3885.51	2054.20	.188378E-02	.387097E+00
(000)	(100)	9	3	9	5	3885.82	1638.83	.390462E-02	.109497E+00
(000)	(020)	9	3	9	5	3885.82	1638.83	.151362E+00	.424460E+01
(000)	(001)	5	2	6	1	3885.88	611.33	.274353E+03	.167353E+03
(000)	(001)	10	-6	10	-3	3885.91	1438.35	.972468E+00	.312852E+02
(000)	(001)	3	2	7	7	3885.96	1260.01	.410056E-02	.560964E-01
(000)	(001)	8	-8	8	-5	3885.96	744.03	.141023E+02	.162529E+02
(000)	(001)	8	1	7	6	3886.68	1259.29	.158358E+00	.719501E+00
(000)	(001)	6	-5	7	-6	3886.80	447.25	.307440E+04	.284569E+03
(000)	(001)	5	3	6	2	3887.02	611.56	.736397E+03	.149853E+03
(000)	(001)	6	-6	7	-7	3887.25	446.67	.100031E+04	.277020E+03
(010)	(110)	4	-1	5	1	3887.64	1908.19	.221527E-02	.225916E+00
(000)	(001)	5	0	6	-1	3888.78	504.58	.545896E+03	.199443E+03
(000)	(001)	3	-2	3	3	3889.83	142.29	.507960E+02	.326593E+01
(010)	(110)	2	-2	3	2	3889.97	1664.93	.396977E-05	.378125E-03
(000)	(100)	10	-9	9	-1	3890.04	1114.48	.230385E-03	.522758E-03
(000)	(020)	9	-5	10	-1	3890.09	1202.07	.212341E-02	.732644E-02
(000)	(001)	10	-7	10	-6	3890.47	1293.92	.666866E+01	.357370E+02
(000)	(001)	10	2	9	7	3890.66	1884.06	.136681E-06	.372190E-04
(010)	(110)	7	-6	6	2	3890.74	2181.31	.180713E-06	.204651E-03
(000)	(001)	10	1	9	6	3891.12	1883.60	.275032E-02	.249108E+00
(000)	(100)	5	1	6	1	3892.63	509.40	.337765E+01	.420542E+00
(000)	(100)	5	-2	6	0	3892.98	416.40	.809539E+00	.193578E+00
(000)	(100)	8	-6	8	0	3893.06	882.98	.115860E-01	.259493E-01
(000)	(001)	2	-2	3	1	3893.10	70.08	.259518E+03	.117927E+02
(000)	(001)	5	-3	6	-4	3893.35	399.43	.367965E+04	.270349E+03

(000)	(001)	6	-2	6	1	3894.35	602.86	.361850E+01	.211480E+01
(000)	(100)	3	-3	4	1	3895.30	136.75	.441522E+00	.920157E-02
(000)	(110)	9	9	9	-9	3895.55	2238.53	.104407E-10	.517906E-08
(000)	(001)	10	-8	10	-5	3895.69	1293.23	.247869E+01	.396647E+02
(000)	(020)	6	0	6	6	3897.52	662.20	.193445E-02	.150145E-02
(000)	(020)	8	4	8	6	3897.69	1417.81	.540264E-02	.157030E+00
(000)	(020)	8	3	8	5	3897.71	1417.79	.162219E-01	.157150E+00
(000)	(100)	4	4	5	4	3898.00	488.96	.138703E+01	.469074E+00
(000)	(100)	4	3	5	5	3898.03	488.94	.415789E+01	.468863E+00
(000)	(100)	5	0	6	2	3898.60	504.58	.971317E+00	.353977E+00
(000)	(001)	5	1	6	0	3898.85	509.40	.180550E+04	.224439E+03
(000)	(100)	10	0	9	6	3899.82	1729.71	.683235E-05	.885512E-03
(000)	(020)	8	-7	9	-1	3900.75	744.13	.184362E-01	.705911E-02
(000)	(020)	8	-3	8	3	3902.19	1007.08	.937604E-02	.126617E-01
(010)	(110)	4	-3	5	-1	3902.23	1821.67	.279497E-03	.187545E-01
(000)	(001)	9	-8	9	-7	3902.35	920.16	.638868E+01	.170604E+02
(000)	(001)	6	-3	7	-4	3902.41	553.13	.204386E+04	.313052E+03
(000)	(001)	9	-9	9	-6	3903.04	920.12	.265125E+02	.235910E+02
(000)	(100)	7	-7	7	-1	3903.13	586.22	.303891E-01	.545392E-02
(000)	(001)	7	-6	8	-7	3903.41	586.46	.597692E+03	.322150E+03
(000)	(001)	7	-7	8	-8	3903.60	586.22	.183705E+04	.329655E+03
(000)	(020)	9	-4	9	2	3903.78	1217.27	.193681E-02	.214878E-01
(010)	(110)	6	-2	7	-2	3904.44	2211.51	.223645E-03	.291706E+00
(010)	(110)	7	-4	6	4	3904.72	2319.03	.132261E-06	.288856E-03
(000)	(001)	3	-1	3	2	3904.78	446.64	.204438E+02	.187608E+01
(000)	(020)	7	-2	7	4	3904.80	817.56	.351098E-02	.572909E-02
(010)	(110)	6	-3	5	5	3904.85	2161.67	.173743E-06	.611875E-04
(000)	(001)	6	-6	5	3	3905.04	446.67	.228358E+01	.629948E+00
(000)	(001)	4	-3	4	2	3905.08	224.85	.230573E+02	.731280E+00
(000)	(001)	3	-3	4	4	3905.23	325.33	.702598E+02	.360745E+01
(000)	(100)	10	-1	9	7	3905.51	1724.02	.210902E-04	.885326E-03
(000)	(001)	6	3	7	2	3906.08	891.23	.200193E+03	.154970E+03
(000)	(001)	6	4	7	3	3906.31	891.26	.739689E+02	.171791E+03
(010)	(110)	4	2	5	2	3906.43	2006.30	.848562E-03	.413600E+00
(000)	(001)	3	-1	6	-2	3906.89	446.64	.275540E+04	.252990E+03
(010)	(110)	4	-2	4	4	3907.19	1873.44	.867393E-07	.225804E-04
(000)	(001)	6	3	7	4	3907.87	1048.63	.562164E+02	.925177E+02
(000)	(001)	6	6	7	5	3907.88	1048.63	.149853E+02	.739856E+02
(010)	(110)	6	1	5	3	3908.09	2003.19	.239837E-02	.387387E+00
(000)	(001)	6	-4	7	-5	3909.05	542.39	.719910E+03	.314416E+03
(000)	(001)	6	1	7	0	3909.55	758.34	.577337E+03	.236113E+03
(000)	(100)	6	0	7	0	3909.96	662.20	.281734E+00	.217976E+00
(000)	(020)	7	3	7	7	3909.96	1221.06	.355254E-01	.133576E+00
(000)	(020)	7	4	7	6	3909.96	1221.03	.118433E-01	.133587E+00
(000)	(020)	6	-1	6	5	3909.99	649.73	.637082E-02	.154961E-02
(000)	(100)	4	-3	4	3	3910.29	224.85	.666422E-02	.211079E-03
(000)	(020)	4	-4	5	4	3910.59	222.03	.437650E-02	.410241E-03
(000)	(001)	6	-1	7	-2	3910.80	649.73	.107769E+04	.261747E+03
(000)	(020)	10	-3	10	1	3911.26	1447.23	.278756E-02	.309930E-01
(000)	(001)	7	-7	6	2	3912.36	586.22	.868702E+01	.154642E+01
(010)	(110)	5	-3	5	3	3912.43	2000.85	.740001E-06	.116934E-03
(000)	(001)	6	2	7	1	3913.11	759.38	.172854E+03	.212942E+03
(000)	(020)	9	5	8	7	3913.45	1820.70	.847327E-03	.564436E-01
(000)	(020)	9	4	8	8	3913.46	1820.70	.282526E-03	.564468E-01
(000)	(001)	9	-7	8	2	3914.33	1079.23	.149051E-01	.283592E-01
(000)	(001)	8	-6	7	3	3914.59	882.98	.868680E-02	.193489E-01
(000)	(001)	4	0	4	3	3914.61	315.91	.562323E+01	.625930E+00
(000)	(110)	9	9	8	-5	3915.28	2238.53	.778743E-09	.384343E-06
(000)	(100)	8	-4	8	2	3916.98	982.95	.215018E-02	.772999E-02
(000)	(020)	7	-4	8	2	3918.87	709.84	.297777E-01	.288852E-01
(000)	(001)	9	3	8	8	3918.88	1638.83	.205168E-01	.570496E+00
(000)	(001)	9	2	8	7	3919.02	1638.69	.905635E-03	.754934E-01
(000)	(100)	9	-5	9	1	3919.62	1202.07	.363721E-02	.125234E-01
(000)	(001)	8	-7	9	-8	3919.85	744.13	.983931E+03	.374906E+03
(000)	(001)	8	-8	9	-9	3919.94	744.03	.321914E+03	.367791E+03
(000)	(001)	10	-9	10	-8	3920.06	1114.48	.106499E+02	.239594E+02

(000)	(001)	7 -4	8 -5	3920.15	709.84	.374450E+03	.363108E+03
(000)	(001)	10-10	10 -7	3920.34	1114.46	.257943E+01	.174062E+02
(010)	(110)	6 -6	6 0	3920.66	2041.91	.753408E-06	.433959E-03
(000)	(001)	10 -4	10 -1	3920.68	1538.30	.287784E+00	.148238E+02
(010)	(110)	7 -3	8 -3	3920.81	2393.01	.219420E-03	.226814E+00
(000)	(100)	5 3	6 3	3921.48	611.56	.888738E+00	.179264E+00
(000)	(100)	7 -3	7 3	3921.49	782.45	.642036E-02	.293854E-02
(000)	(020)	9 9	10 5	3921.69	2238.53	.250369E-04	.123366E-01
(000)	(020)	9 8	10 6	3921.69	2238.53	.834580E-05	.123368E-01
(000)	(100)	5 2	6 4	3921.74	611.33	.293199E+00	.177213E+00
(010)	(110)	8 -7	7 1	3922.63	2337.94	.370115E-06	.293666E-03
(000)	(001)	7 -5	6 4	3923.16	704.23	.277185E-01	.871517E-02
(000)	(100)	9 1	8 7	3923.25	1481.97	.120630E-04	.157934E-03
(000)	(100)	7 -1	8 -1	3923.37	842.97	.171567E+00	.104911E+00
(000)	(001)	10 -8	9 1	3923.38	1293.23	.203737E-02	.323724E-01
(000)	(001)	7 -3	8 -6	3924.18	704.23	.115083E+04	.361745E+03
(000)	(100)	5 -4	6 -2	3925.10	326.63	.109134E+00	.168298E-01
(000)	(100)	9 -7	9 -1	3925.29	1079.23	.580016E-02	.110050E-01
(000)	(100)	9 0	8 3	3925.47	1479.75	.407022E-05	.158085E-03
(010)	(110)	6 -4	6 2	3925.74	2146.31	.675982E-06	.641488E-03
(000)	(020)	9 -9	9 1	3926.02	920.12	.179867E-02	.159111E-02
(010)	(110)	3 -3	4 1	3926.11	1731.89	.568854E-05	.246675E-03
(000)	(100)	6 -1	7 1	3926.19	649.73	.455476E+00	.110191E+00
(000)	(001)	5 -4	5 1	3928.17	326.63	.500186E+00	.770742E-01
(000)	(001)	6 0	7 -1	3928.38	662.20	.370947E+03	.285654E+03
(000)	(001)	8 -8	7 1	3928.46	744.03	.469549E+00	.535302E+00
(000)	(001)	7 4	8 3	3929.38	1221.05	.155561E+02	.174598E+03
(000)	(001)	7 5	8 4	3929.41	1221.06	.423703E+02	.158524E+03
(000)	(001)	7 2	8 1	3929.51	1063.04	.420226E+02	.221093E+03
(000)	(100)	5 -4	5 2	3929.69	326.63	.268606E-02	.413738E-03
(000)	(001)	3 -3	4 0	3929.91	136.75	.605270E+03	.125031E+02
(000)	(001)	9 -3	9 0	3929.94	1283.24	.128006E+01	.645189E+01
(000)	(001)	6 -2	7 -3	3930.00	602.86	.513203E+03	.297262E+03
(000)	(001)	4 -1	4 4	3930.04	300.52	.910149E+01	.412280E+00
(000)	(100)	6 -2	6 4	3930.21	602.86	.124808E-02	.722774E-03
(000)	(001)	7 3	8 2	3930.38	1063.23	.138904E+03	.243772E+03
(000)	(100)	4 -4	5 0	3930.43	222.03	.674124E-01	.628716E-02
(000)	(001)	10 -6	9 3	3931.48	1438.35	.269622E-02	.857345E-01
(000)	(100)	10 -6	10 0	3931.87	1438.35	.854717E-03	.112782E-01
(000)	(001)	7 -2	8 -3	3931.96	817.56	.192442E+03	.311850E+03
(000)	(100)	8 -2	9 -2	3933.33	1050.64	.929444E-02	.460333E-01
(000)	(001)	7 0	8 -1	3933.40	929.72	.107914E+03	.299311E+03
(000)	(001)	5 -2	5 3	3935.31	416.40	.467935E+01	.110690E+01
(000)	(100)	6 -3	7 -1	3936.22	553.13	.173401E+00	.263312E-01
(000)	(001)	9 -8	10 -9	3936.22	920.16	.156229E+03	.413604E+03
(000)	(001)	9 -9	10-10	3936.25	920.12	.476473E+03	.420393E+03
(010)	(110)	4 4	3 4	3936.67	2129.84	.453746E-03	.396792E+00
(010)	(110)	4 3	5 5	3936.70	2129.82	.135945E-02	.396231E+00
(000)	(001)	2 0	3 3	3936.94	95.18	.253428E+02	.120441E+01
(000)	(001)	8 -5	9 -6	3937.31	885.85	.551182E+03	.412509E+03
(010)	(110)	5 -2	6 0	3938.14	2024.43	.583811E-04	.307864E-01
(000)	(001)	7 7	8 6	3938.14	1400.82	.104625E+02	.924756E+02
(000)	(001)	7 6	8 5	3938.14	1400.82	.233468E+01	.751708E+02
(010)	(110)	3 1	6 1	3938.37	2131.19	.582092E-03	.170704E+00
(000)	(001)	6 -4	5 5	3939.50	542.89	.430708E-02	.186655E-02
(000)	(001)	8 -6	9 -7	3939.53	682.98	.185626E+03	.410844E+03
(000)	(100)	6 -6	5 4	3940.29	446.67	.446735E-05	.122027E-05
(000)	(100)	5 -1	5 5	3940.33	446.64	.112014E-02	.101974E-03
(000)	(100)	10 -3	9 5	3940.61	1584.04	.156047E-03	.331820E-02
(000)	(020)	10 -3	9 5	3940.61	1584.04	.272190E-03	.578791E-02
(000)	(100)	9 -3	10 -3	3941.07	1283.24	.311919E-02	.156772E-01
(000)	(001)	8 -2	8 1	3941.91	1050.64	.979632E+00	.484134E+01
(000)	(001)	7 1	8 0	3942.00	933.15	.298120E+03	.279581E+03
(000)	(110)	9 7	8 -7	3942.03	2022.04	.617991E-03	.107286E-05
(000)	(100)	6 2	7 2	3944.35	759.38	.251071E-01	.306849E-01
(010)	(110)	5 0	6 2	3944.95	2127.10	.137912E-03	.118778E+00

(000)	(001)	6	-3	6	2	3945.45	553.13	.263837E+01	.399703E+00
(000)	(100)	6	1	7	3	3945.60	758.34	.666555E-01	.270110E-01
(000)	(100)	7	-7	6	3	3946.62	586.22	.297527E-04	.528060E-05
(000)	(020)	5	-5	6	3	3947.45	325.33	.189783E-01	.964007E-03
(000)	(001)	9	-5	8	4	3948.40	1202.07	.102064E+00	.346953E+00
(000)	(100)	6	6	7	6	3949.56	1048.63	.223895E+00	.109131E+01
(000)	(100)	6	5	7	7	3949.56	1048.63	.670181E+00	.109130E+01
(000)	(001)	7	-3	8	-4	3950.06	782.45	.744566E+03	.338316E+03
(010)	(110)	7	-5	7	1	3950.68	2309.89	.445496E-05	.306801E-02
(000)	(001)	8	3	9	2	3951.83	1417.79	.261155E+02	.249530E+03
(000)	(001)	8	4	9	3	3952.02	1417.81	.792623E+01	.227213E+03
(000)	(001)	8	-3	9	-4	3952.21	1007.08	.274153E+03	.365539E+03
(000)	(001)	2	-1	3	2	3952.38	79.50	.372159E+03	.520906E+01
(000)	(100)	8	-8	8	-2	3952.41	744.03	.917320E-03	.103944E-02
(000)	(100)	5	5	6	5	3952.55	743.96	.579156E-01	.218671E-01
(000)	(100)	5	4	6	6	3952.56	743.95	.193155E-01	.218777E-01
(000)	(020)	9	-1	8	5	3953.29	1362.21	.195138E-03	.142780E-02
(000)	(001)	8	1	9	0	3953.69	1259.29	.651802E+02	.291112E+03
(000)	(001)	9	-6	10	-7	3954.15	1080.65	.811478E+02	.461662E+03
(000)	(001)	7	-1	7	2	3954.34	842.97	.165475E+01	.100393E+01
(000)	(100)	6	-5	6	1	3954.78	447.25	.414160E-02	.376761E-03
(000)	(001)	9	-9	8	0	3955.03	920.12	.100936E+01	.886333E+00
(000)	(001)	9	-7	10	-8	3955.31	1079.23	.244507E+03	.460397E+03
(000)	(001)	10	4	9	9	3956.23	2066.51	.165553E-03	.106331E+00
(000)	(001)	10	3	9	8	3956.26	2066.48	.198612E-02	.425149E+00
(000)	(001)	3	-1	4	2	3956.56	173.37	.173016E+03	.423131E+01
(000)	(001)	8	2	9	1	3956.60	1260.01	.230299E+02	.309429E+03
(000)	(001)	8	-1	9	-2	3957.26	1124.98	.152808E+03	.358130E+03
(000)	(001)	7	-1	8	-2	3957.49	842.97	.566222E+03	.343252E+03
(000)	(001)	8	5	9	4	3958.09	1598.74	.707191E+01	.160647E+03
(000)	(001)	8	6	9	5	3958.10	1598.74	.258031E+01	.175879E+03
(000)	(100)	7	-2	8	0	3958.48	817.56	.251297E-02	.404496E-02
(000)	(100)	8	-8	7	2	3959.70	744.03	.106741E-04	.120729E-04
(000)	(020)	8	-5	9	1	3960.29	885.83	.443809E-01	.330222E-01
(010)	(110)	4	-3	4	3	3960.89	1821.67	.129595E-05	.856712E-04
(000)	(001)	6	-5	6	0	3961.00	447.25	.539710E+01	.482028E+00
(000)	(100)	10	2	9	8	3961.75	1884.06	.557594E-06	.149111E-03
(000)	(100)	3	-1	4	3	3961.77	173.37	.403275E-02	.984960E-04
(000)	(100)	10	1	9	9	3962.21	1883.60	.167921E-05	.149337E-03
(000)	(001)	7	-4	7	1	3962.65	709.84	.193707E+01	.185823E+01
(000)	(001)	6	0	6	3	3965.14	662.20	.157251E+01	.119971E+01
(000)	(100)	7	1	8	1	3965.96	983.15	.322746E-02	.300847E-02
(000)	(001)	8	-4	9	-5	3967.09	982.95	.104765E+03	.371878E+03
(000)	(100)	10	-8	10	-2	3968.08	1293.23	.160382E-03	.251965E-02
(010)	(110)	6	0	7	0	3969.06	2283.60	.255505E-04	.463204E-01
(010)	(110)	5	-4	6	-2	3969.11	1922.94	.106965E-05	.344024E-03
(010)	(110)	4	-4	5	0	3969.13	1817.47	.189288E-05	.349683E-03
(000)	(100)	7	0	8	2	3970.21	929.72	.288118E-02	.791714E-02
(000)	(100)	5	-2	5	4	3970.56	416.40	.831169E-04	.206589E-04
(010)	(110)	5	3	6	3	3970.94	2252.71	.226851E-03	.118158E+00
(000)	(100)	5	-5	6	-1	3971.09	325.33	.105026E-01	.530307E-03
(010)	(110)	5	2	6	4	3971.21	2252.54	.741818E-04	.115813E+00
(000)	(001)	9	-4	10	-5	3971.65	1217.27	.376465E+02	.410529E+03
(000)	(100)	7	3	8	5	3971.87	1221.06	.184923E+00	.684473E+00
(000)	(100)	7	4	8	6	3971.88	1221.05	.616382E-01	.684409E+00
(000)	(020)	9	-2	8	6	3972.10	1343.40	.892610E-04	.160222E-02
(000)	(001)	5	1	5	4	3972.98	509.40	.334927E+01	.469570E+00
(000)	(100)	10	-6	9	4	3972.99	1438.35	.233008E-04	.733177E-03
(000)	(020)	10	-6	9	4	3972.99	1438.35	.271145E-04	.853181E-03
(000)	(020)	7	-6	6	6	3973.26	586.46	.973766E-05	.515623E-05
(000)	(001)	8	-4	7	5	3973.56	962.95	.330052E-01	.134685E+00
(000)	(001)	8	0	9	-1	3973.87	1133.84	.462018E+02	.337525E+03
(000)	(001)	4	-4	3	-1	3973.31	222.03	.121793E+03	.112307E+02
(000)	(100)	6	4	7	4	3973.57	891.26	.607801E-01	.138703E+00
(000)	(100)	6	3	7	5	3973.61	891.23	.182714E+00	.138966E+00
(000)	(001)	9	2	10	1	3973.68	1638.69	.388290E+01	.319064E+03

(000)	(001)	9	3	10	2	3976.32	1638.83	.109314E+02	.299569E+03
(000)	(001)	8	8	9	7	3976.48	1798.24	.428441E+00	.756422E+02
(000)	(001)	8	7	9	6	3976.48	1798.24	.155977E+01	.917940E+02
(000)	(001)	6	-1	6	4	3977.66	649.73	.455373E+01	.108741E+01
(000)	(001)	5	0	5	5	3977.81	504.58	.528439E+01	.188744E+01
(000)	(020)	8	-7	7	5	3978.24	744.13	.696548E-04	.261509E-04
(000)	(100)	9	-9	8	1	3978.99	920.12	.230905E-04	.201540E-04
(000)	(001)	9	4	10	3	3979.17	1820.70	.117688E+01	.231251E+03
(000)	(001)	9	5	10	4	3979.21	1820.70	.385928E+01	.252773E+03
(000)	(001)	9	0	10	-1	3979.31	1479.75	.914202E+01	.350267E+03
(000)	(001)	4	-2	5	1	3979.31	275.49	.788166E+02	.938182E+01
(010)	(110)	7	-7	7	-1	3979.42	2180.84	.591102E-05	.217671E-02
(000)	(100)	6	-3	6	3	3979.91	553.13	.311526E-03	.467865E-04
(000)	(001)	7	-2	7	3	3980.01	817.56	.120141E+00	.192337E+00
(000)	(100)	4	-2	5	2	3980.83	275.49	.426943E-03	.508011E-04
(000)	(001)	9	-2	10	-3	3980.86	1343.40	.207415E+02	.413144E+03
(000)	(001)	9	-5	10	-6	3982.32	1202.07	.122474E+03	.412786E+03
(000)	(020)	10	-10	10	0	3982.47	1114.46	.303904E-03	.201878E-02
(000)	(100)	6	-3	7	-3	3982.49	447.25	.313111E-05	.282855E-06
(000)	(100)	9	-7	8	3	3982.58	1079.23	.905425E-06	.169321E-05
(000)	(100)	3	-6	7	4	3983.85	882.98	.109411E-05	.239465E-05
(000)	(001)	8	-2	9	-3	3984.88	1050.64	.896393E+02	.394222E+03
(000)	(100)	8	0	9	0	3985.31	1183.84	.910523E-02	.663268E-01
(000)	(100)	7	-6	7	0	3985.70	586.46	.341877E-03	.180464E-03
(000)	(001)	3	-2	4	1	3986.07	142.29	.962716E+02	.604034E+01
(000)	(001)	9	1	10	0	3986.17	1481.97	.286294E+02	.368913E+03
(000)	(001)	8	-3	8	2	3986.53	1007.08	.209829E+01	.277365E+01
(000)	(100)	7	-4	8	-2	3986.60	709.84	.383996E-02	.366158E-02
(010)	(110)	6	-1	7	1	3987.83	2272.74	.600205E-05	.342679E-02
(000)	(100)	10	-4	10	2	3988.25	1588.38	.101727E-04	.515120E-03
(000)	(100)	10	-8	9	2	3988.31	1293.23	.255126E-08	.398778E-07
(000)	(020)	9	-8	10	-2	3988.86	920.16	.219528E-02	.573515E-02
(000)	(020)	9	-8	8	4	3989.13	920.16	.279610E-04	.730430E-04
(000)	(001)	8	-5	8	0	3989.30	885.85	.771947E+00	.570202E+00
(010)	(110)	5	-4	5	2	3989.79	1922.94	.122514E-05	.391992E-03
(000)	(020)	6	-6	7	2	3990.83	446.67	.403969E-02	.108948E-02
(000)	(100)	9	-5	8	5	3990.86	1202.07	.474901E-04	.159718E-03
(000)	(100)	7	-5	6	5	3992.23	704.23	.339335E-05	.104845E-05
(000)	(100)	3	-2	4	4	3992.88	142.29	.381861E-04	.239181E-05
(000)	(001)	10	-10	9	-1	3993.25	1114.46	.552426E-01	.365976E+00
(000)	(100)	8	4	9	4	3993.53	1417.81	.152303E-01	.432053E+00
(000)	(020)	8	4	9	4	3993.53	1417.81	.139862E+00	.396760E+01
(000)	(100)	7	-4	7	2	3993.89	709.84	.363569E-04	.350806E-04
(000)	(001)	9	7	10	6	3994.52	2022.04	.942270E+00	.161433E+03
(000)	(001)	9	6	10	5	3994.52	2022.04	.342002E+00	.175778E+03
(000)	(001)	10	-2	10	1	3996.24	1618.13	.412109E-01	.305268E+01
(000)	(100)	8	-1	9	1	3996.71	1124.98	.500192E-01	.116071E+00
(000)	(020)	8	0	7	6	3997.17	1183.84	.547392E-04	.397563E-03
(000)	(100)	8	-3	9	-1	3997.44	1007.08	.268931E-01	.354519E-01
(000)	(100)	9	-3	9	3	3998.44	1283.24	.128165E-03	.634923E-03
(000)	(100)	7	3	8	3	3998.58	1063.23	.207420E+00	.357807E+00
(010)	(110)	6	-3	7	-1	3998.59	2161.67	.148676E-04	.497018E-02
(000)	(100)	7	2	8	4	3998.89	1063.04	.696438E-01	.360063E+00
(000)	(001)	9	-4	9	1	3999.84	1217.27	.113790E+00	.123228E+01
(000)	(100)	9	-1	10	-1	4001.46	1362.21	.251312E-01	.181669E+00
(000)	(100)	5	-3	6	1	4002.60	399.43	.404147E-02	.288828E-03
(000)	(001)	7	-6	7	-1	4004.12	586.46	.101988E+00	.535877E-01
(000)	(100)	7	7	8	7	4004.40	1400.82	.234494E-04	.203835E-03
(000)	(100)	7	6	8	8	4004.40	1400.82	.781768E-05	.203867E-03
(000)	(100)	10	-10	9	0	4004.69	1114.46	.436727E-05	.288500E-04
(000)	(001)	7	-3	6	6	4005.08	782.45	.188821E+01	.846179E+00
(000)	(020)	8	-1	7	7	4006.04	1124.98	.181571E-03	.420360E-03
(000)	(020)	10	-9	9	3	4006.69	1114.48	.672349E-04	.147990E-03
(000)	(001)	9	-1	9	2	4007.41	1362.21	.469271E+00	.338723E+01
(000)	(001)	9	-1	10	-2	4007.52	1362.21	.551749E+02	.398245E+03
(010)	(110)	6	1	7	3	4008.48	2399.96	.279677E-05	.292361E-02

(000)	(001)	4	-4	4	3	4008.49	222.03	.540351E+02	.494140E+01
(000)	(100)	9	-9	9	-3	4008.64	920.12	.456028E-04	.395088E-04
(000)	(001)	5	-3	6	0	4008.82	399.43	.205461E+03	.146607E+02
(000)	(001)	9	-3	10	-4	4009.53	1283.24	.883502E+02	.436471E+03
(010)	(110)	3	-1	4	3	4010.18	1772.38	.379023E-05	.195391E-03
(000)	(100)	8	-2	8	4	4011.20	1050.64	.121424E-03	.589709E-03
(010)	(110)	6	-2	6	4	4012.24	2211.51	.109585E-05	.139094E-02
(010)	(110)	5	-1	5	5	4012.32	2054.20	.140756E-05	.280105E-03
(000)	(100)	8	-5	8	1	4013.26	885.85	.912457E-06	.669966E-06
(000)	(110)	8	8	7	-6	4013.42	1798.24	.763395E-09	.133539E-06
(000)	(100)	9	3	10	3	4014.51	1638.83	.106375E-01	.288744E+00
(000)	(100)	9	2	10	4	4014.68	1638.69	.354150E-02	.288184E+00
(000)	(100)	8	-4	7	6	4015.24	982.95	.491214E-05	.172272E-04
(010)	(110)	7	-3	7	3	4015.43	2393.01	.427347E-05	.431338E-02
(000)	(020)	9	-6	10	0	4016.28	1080.65	.585205E-02	.327781E-01
(000)	(100)	6	-6	7	-2	4016.51	446.67	.983626E-02	.263581E-02
(000)	(001)	8	0	8	3	4016.59	1133.84	.398314E-01	.287891E+00
(000)	(020)	6	-4	6	6	4016.83	542.89	.329462E-03	.140029E-03
(000)	(020)	7	-5	7	5	4018.14	704.23	.272588E-02	.836803E-03
(000)	(001)	3	1	4	4	4018.30	212.26	.142150E+03	.412472E+01
(000)	(001)	10	-4	9	5	4018.46	1538.38	.339400E-03	.170571E-01
(010)	(110)	5	-5	6	-1	4018.88	1920.83	.564155E-04	.591316E-02
(000)	(001)	10	-5	10	0	4020.89	1447.25	.253739E+00	.276594E+01
(000)	(100)	8	2	9	2	4021.53	1260.01	.511671E-01	.676378E+00
(000)	(100)	8	-7	8	-1	4022.21	744.13	.791642E-04	.293962E-04
(000)	(100)	8	1	9	3	4022.39	1259.29	.156729E+00	.688075E+00
(000)	(001)	7	1	7	4	4023.85	933.15	.117309E+01	.107789E+01
(000)	(100)	7	-1	7	5	4023.87	842.97	.636216E-03	.379322E-03
(000)	(001)	3	0	4	3	4024.11	206.41	.107639E+02	.909761E+00
(000)	(001)	4	-3	5	0	4024.18	224.85	.222751E+03	.685564E+01
(010)	(110)	6	-6	5	4	4024.60	2041.91	.494592E-08	.277525E-05
(000)	(001)	9	9	10	8	4025.25	2238.53	.188472E+00	.904779E+02
(000)	(001)	9	8	10	7	4025.25	2238.53	.523770E-01	.754322E+02
(000)	(001)	8	-1	8	4	4025.49	1124.98	.180769E+00	.416480E+00
(000)	(001)	5	-5	5	2	4026.09	325.33	.715525E+00	.356354E-01
(000)	(020)	8	-6	8	4	4026.31	852.98	.115136E-02	.249337E-02
(000)	(001)	9	-2	9	3	4026.43	1343.40	.152932E+00	.301172E+01
(010)	(110)	6	-5	6	1	4026.65	2042.91	.494070E-05	.928076E-03
(000)	(001)	7	0	7	3	4026.79	929.72	.393171E+00	.106521E+01
(000)	(100)	9	-2	10	0	4026.82	1343.40	.175404E-01	.345394E+00
(000)	(001)	9	-6	9	-1	4027.06	1080.65	.157971E+00	.882450E+00
(000)	(001)	6	2	6	5	4028.15	759.38	.155461E+01	.186046E+01
(000)	(001)	5	-3	6	-2	4028.20	325.33	.177825E+03	.885160E+01
(000)	(001)	6	1	6	6	4029.19	758.34	.195144E+01	.774380E+00
(000)	(100)	6	-4	7	0	4029.27	542.89	.127426E-01	.539920E-02
(000)	(100)	8	6	9	6	4030.79	1598.74	.154488E-02	.103383E+00
(000)	(100)	8	5	9	7	4030.79	1598.74	.463475E-02	.103385E+00
(000)	(001)	10	-3	10	2	4031.11	1534.04	.100512E+00	.208931E+01
(000)	(100)	4	-3	5	3	4031.71	224.85	.249152E-02	.765383E-04
(000)	(100)	6	0	6	6	4034.31	662.20	.182726E-03	.137016E-03
(000)	(001)	6	-5	5	4	4035.13	447.25	.426498E+02	.389259E+01
(000)	(100)	10	-2	10	4	4035.24	1618.13	.240017E-03	.176073E-01
(000)	(001)	4	0	5	3	4035.80	315.91	.384633E+02	.547977E+01
(010)	(110)	4	-2	5	2	4037.29	1875.44	.546919E-05	.137709E-02
(000)	(100)	9	-6	9	0	4038.50	1080.65	.103942E-04	.606844E-04
(010)	(110)	6	-5	7	-3	4040.20	2042.91	.852107E-04	.159526E-01
(000)	(001)	7	-6	6	3	4040.68	586.46	.124446E+01	.647931E+00
(000)	(020)	7	-7	8	1	4041.15	586.22	.282676E-02	.489991E-03
(000)	(020)	9	-7	9	3	4041.94	1079.23	.276449E-02	.509387E-02
(010)	(110)	5	-2	5	4	4042.08	2024.43	.466569E-06	.239712E-03
(000)	(100)	7	-6	8	-4	4042.18	586.46	.187932E-01	.978157E-02
(010)	(110)	7	-7	6	3	4042.81	2180.84	.287791E-07	.104316E-04
(000)	(100)	8	-5	9	-3	4042.91	885.85	.741847E-01	.540702E-01
(010)	(110)	3	-2	4	4	4043.11	1739.52	.116690E-05	.152902E-03
(000)	(100)	9	-4	10	-2	4044.04	1217.27	.148330E-01	.159071E+00
(000)	(100)	9	1	10	1	4044.14	1481.97	.850632E-01	.108039E+01

(000)	(100)	6 -1	6 5	4046.78	649.73	.687437E-03	.161353E-03
(000)	(100)	9 0	10 2	4046.88	1479.73	.298333E-01	.112395E+01
(000)	(100)	8 8	9 9	4047.57	1798.24	.299677E-02	.519794E+00
(000)	(100)	8 7	9 9	4047.57	1798.24	.899028E-02	.519792E+00
(000)	(001)	6 -4	7 -1	4047.69	542.89	.388277E+02	.163767E+02
(010)	(110)	8 -8	8 -2	4048.60	2337.73	.131157E-05	.302180E-02
(000)	(100)	7 -2	7 4	4049.27	817.56	.340223E-03	.535364E-03
(000)	(020)	5 1	6 5	4050.32	509.40	.272163E-01	.325670E-02
(000)	(001)	6 -6	6 1	4050.54	446.67	.415003E+01	.110274E+01
(000)	(001)	4 -1	5 2	4050.90	300.52	.482282E+02	.211947E+01
(000)	(001)	5 -1	6 2	4051.94	446.64	.101755E+03	.900832E+01
(000)	(110)	10 5	10 -9	4052.25	2269.59	.390021E-08	.215853E-05
(000)	(001)	8 -7	7 2	4053.18	744.13	.474339E+01	.174792E+01
(000)	(100)	8 -3	8 3	4054.73	1007.08	.860120E-03	.111784E-02
(000)	(110)	9 8	8 -4	4054.83	2238.53	.664639E-09	.950216E-06
(000)	(020)	5 0	6 6	4055.14	504.58	.950891E-02	.333156E-02
(000)	(001)	9 -3	8 6	4055.72	1283.24	.904586E-03	.441798E-02
(000)	(001)	8 -7	8 -2	4056.33	744.13	.322485E+00	.118742E+00
(000)	(100)	9 3	10 5	4057.44	1820.70	.634223E-02	.407394E+00
(000)	(100)	9 4	10 6	4057.44	1820.70	.211407E-02	.407447E+00
(000)	(100)	8 0	8 6	4059.09	1133.84	.438882E-03	.313891E-02
(000)	(020)	6 0	7 4	4060.16	662.20	.149985E-01	.111749E-01
(000)	(100)	5 -5	5 5	4061.64	325.33	.152783E-04	.754248E-06
(010)	(110)	6 -3	6 3	4061.98	2161.67	.298378E-05	.981902E-03
(000)	(100)	7 -5	8 -1	4062.11	704.23	.835080E-01	.259655E-01
(000)	(100)	9 -8	9 -2	4063.81	920.16	.160411E-05	.411344E-05
(000)	(100)	9 -4	9 2	4064.27	1217.27	.179641E-03	.191431E-02
(000)	(100)	7 1	7 7	4065.04	933.15	.799536E-03	.727138E-03
(000)	(020)	10 -8	10 2	4065.70	1293.23	.534841E-03	.820078E-02
(000)	(100)	7 -7	8 -3	4065.74	586.22	.955947E-01	.164702E-01
(000)	(020)	7 -1	8 3	4066.30	842.97	.480267E-01	.253855E-01
(000)	(001)	5 -4	6 -1	4066.73	326.63	.479331E+02	.713442E+01
(010)	(110)	7 -4	8 -2	4067.30	2319.03	.297209E-04	.623152E-01
(000)	(110)	10 3	9 -9	4067.60	2066.48	.911238E-07	.189724E-04
(000)	(100)	9 -2	9 4	4067.94	1343.40	.446979E-03	.871264E-02
(000)	(020)	9 -2	9 4	4067.94	1343.40	.987730E-03	.192531E-01
(000)	(100)	8 -1	8 5	4067.95	1124.93	.141797E-02	.323282E-02
(000)	(100)	7 0	7 6	4068.47	929.72	.274808E-03	.736901E-03
(010)	(110)	5 -3	6 1	4068.71	2000.85	.412441E-04	.626701E-02
(000)	(100)	10 -3	10 3	4069.30	1584.04	.885398E-03	.182319E-01
(000)	(100)	10-10	10 -4	4069.55	1114.46	.111921E-04	.727564E-04
(000)	(001)	6 -2	7 1	4069.63	602.86	.276339E+02	.154548E+02
(000)	(100)	10 -7	10 -1	4069.75	1293.92	.623697E-04	.319512E-03
(000)	(001)	9 -6	8 3	4069.78	1080.65	.869465E-03	.480597E-02
(010)	(110)	8 -8	7 2	4070.15	2337.73	.820959E-08	.188143E-04
(000)	(001)	10 0	10 3	4070.16	1729.71	.264056E-01	.327910E+01
(000)	(020)	8 -2	9 2	4070.41	1050.64	.101846E-01	.487485E-01
(000)	(001)	8 -3	7 4	4070.65	885.85	.251429E-02	.182008E-02
(000)	(100)	4 0	5 4	4071.05	315.91	.156811E-02	.221471E-03
(010)	(110)	7 -6	7 0	4071.35	2181.31	.134742E-05	.145822E-02
(000)	(001)	9 -8	8 1	4072.39	920.16	.263991E+00	.624351E+00
(000)	(020)	6 -1	7 5	4072.64	649.73	.501419E-01	.116944E-01
(010)	(110)	6 -6	7 -2	4074.04	2041.91	.367926E-04	.203945E-01
(000)	(001)	9 1	9 4	4074.86	1481.97	.344249E-01	.433938E+00
(000)	(020)	9 -3	10 1	4075.27	1283.24	.176253E-01	.856685E-01
(000)	(001)	10 -7	9 2	4075.70	1293.92	.181006E-02	.925915E-02
(000)	(001)	10 -7	10 -2	4075.81	1293.92	.229276E-01	.117281E+00
(000)	(001)	10 -1	10 4	4075.89	1724.02	.302732E-01	.322885E+01
(000)	(100)	9 7	10 7	4076.21	2022.04	.718817E-02	.120682E+01
(000)	(100)	9 6	10 8	4076.21	2022.04	.239605E-02	.120681E+01
(000)	(100)	5 -4	6 2	4076.55	326.63	.474479E-02	.704519E-03
(000)	(001)	9 0	9 5	4077.09	1479.73	.534283E-02	.199796E+00
(000)	(001)	7 -4	6 5	4077.69	709.84	.404513E-03	.377106E-03
(000)	(100)	10 -5	10 1	4078.86	1447.25	.277329E-03	.295682E-02
(000)	(001)	8 2	8 5	4078.95	1260.01	.887702E-01	.115694E+01
(000)	(110)	10 5	9 -7	4079.05	2269.59	.414893E-07	.228109E-04

(000)	(001)	8 1	8 6	4079.67	1259.29	.267051E+00	.115595E+01
(000)	(001)	3 -2	6 1	4080.81	416.40	.154134E+02	.351602E+01
(000)	(001)	7 -7	7 0	4081.67	586.22	.357171E+00	.612974E-01
(000)	(020)	6 6	7 6	4082.38	1048.63	.700700E+00	.331164E+01
(000)	(020)	6 5	7 7	4082.39	1048.63	.210212E+01	.331166E+01
(000)	(001)	7 3	7 6	4082.74	1063.23	.512393E+00	.865678E+00
(000)	(001)	7 2	7 7	4082.93	1063.04	.375478E+00	.190127E+01
(000)	(001)	5 -3	5 4	4082.95	399.43	.859785E+01	.602362E+00
(000)	(110)	9 8	10-10	4083.30	2238.53	.109467E-08	.155411E-05
(000)	(001)	6 -4	6 3	4084.45	542.89	.789035E-01	.329807E-01
(000)	(001)	6 -6	7 -3	4086.19	446.67	.292406E+02	.770196E+01
(000)	(100)	5 -1	6 3	4086.40	446.64	.174177E-01	.152897E-02
(000)	(100)	6 -6	6 4	4086.40	446.67	.203591E-04	.536229E-05
(000)	(100)	4 -1	5 5	4086.45	300.52	.548624E-02	.239004E-03
(010)	(110)	7 -4	7 2	4088.83	2319.03	.109842E-05	.229089E-02
(000)	(100)	9 9	10 9	4089.42	2238.53	.426046E-02	.201318E+01
(000)	(100)	9 8	10 10	4089.42	2238.53	.142016E-02	.201319E+01
(000)	(100)	10 -4	9 6	4091.15	1538.38	.771364E-06	.380774E-04
(010)	(110)	4 -3	5 3	4091.61	1321.67	.100806E-04	.645105E-03
(000)	(020)	7 -2	8 4	4091.73	817.56	.172343E-01	.268375E-01
(000)	(001)	7 -3	8 0	4092.70	782.45	.551797E+02	.241987E+02
(000)	(001)	7 -5	7 2	4093.08	704.23	.302308E+00	.911047E-01
(000)	(020)	10 4	10 6	4093.71	2066.51	.163944E-02	.101761E+01
(000)	(020)	10 3	10 5	4093.74	2066.48	.492016E-02	.101784E+01
(000)	(001)	3 -3	4 4	4093.81	136.75	.120063E+03	.238086E+01
(010)	(110)	7 -5	6 5	4094.44	2309.89	.471932E-08	.313595E-05
(000)	(020)	7 5	8 3	4094.44	1221.06	.999189E+00	.358769E+01
(000)	(020)	7 4	8 6	4094.45	1221.05	.333096E+00	.358736E+01
(000)	(001)	8 -2	7 7	4095.33	1050.64	.137010E-03	.651735E-03
(000)	(001)	7 -5	8 -2	4096.23	704.23	.484822E+02	.145996E+02
(000)	(001)	4 2	5 5	4098.10	384.29	.471178E+01	.917569E+00
(000)	(020)	8 -8	9 0	4098.68	744.03	.261771E-03	.286035E-03
(000)	(001)	10 -9	9 0	4098.70	1114.48	.543893E+00	.117029E+01
(000)	(001)	4 1	5 4	4099.42	382.96	.641834E+02	.413885E+01
(000)	(100)	6 -2	7 2	4100.87	602.86	.120332E-01	.667850E-02
(000)	(100)	8 -6	9 -2	4100.99	882.98	.333115E-01	.708253E-01
(000)	(100)	8 -7	9 -3	4102.09	744.13	.900316E-01	.327896E-01
(010)	(020)	3 -8	9 3	4102.61	2337.73	.892715E-09	.202970E-05
(000)	(100)	9 -6	10 -4	4103.36	1080.65	.230676E-01	.137427E+00
(010)	(110)	6 -4	7 0	4106.35	2146.31	.233909E-04	.212210E-01
(000)	(020)	8 3	9 5	4106.86	1417.79	.469688E-01	.431839E+00
(000)	(100)	8 3	9 5	4106.86	1417.79	.431667E+00	.396881E+01
(000)	(001)	3 -6	8 1	4109.57	882.98	.666433E-01	.141398E+00
(000)	(001)	10 -3	9 4	4109.58	1447.25	.513649E-01	.543547E+00
(000)	(100)	10 -9	10 -3	4109.83	1114.48	.266632E-04	.572154E-04
(000)	(100)	7 -6	6 6	4110.05	586.46	.718621E-06	.367856E-06
(000)	(110)	9 8	9 -6	4111.10	2238.53	.807784E-10	.113906E-06
(010)	(110)	7 -6	8 -4	4112.05	2181.31	.389712E-04	.417582E-01
(000)	(110)	9 6	9 -8	4112.08	2022.04	.990452E-09	.494509E-06
(000)	(100)	9 -6	8 6	4112.28	1080.65	.724064E-05	.396090E-04
(000)	(100)	8 -5	7 7	4112.34	885.85	.779760E-05	.558740E-05
(000)	(020)	6 -3	6 3	4112.47	447.25	.263792E-03	.230769E-04
(000)	(001)	6 -5	7 -2	4113.28	447.25	.812647E+02	.710777E+01
(000)	(020)	9 -3	8 3	4113.43	1202.07	.808459E-04	.263798E-03
(000)	(020)	8 -3	9 3	4114.09	1007.08	.392833E-01	.503170E-01
(000)	(001)	6 -3	7 0	4114.76	553.13	.335141E+02	.486835E+01
(000)	(020)	9 5	9 7	4114.80	1820.70	.130232E-01	.824830E+00
(000)	(020)	9 4	9 6	4114.80	1620.70	.434126E-02	.824914E+00
(000)	(001)	9 -6	9 -3	4115.36	920.16	.560789E-01	.142002E+00
(000)	(100)	7 -3	8 1	4116.66	782.45	.531098E-01	.231554E-01
(000)	(100)	5 -2	6 4	4116.67	416.40	.641544E-02	.145071E-02
(000)	(100)	7 -7	7 3	4117.72	586.22	.102592E-03	.174527E-04
(000)	(001)	5 1	6 4	4117.99	509.40	.184880E+02	.217591E+01
(000)	(100)	8 -8	9 -4	4118.38	744.03	.361341E-01	.392944E-01
(000)	(001)	8 -8	8 -1	4119.09	744.03	.465063E+00	.505651E+00
(000)	(020)	9 3	10 3	4120.29	1638.83	.168662E+00	.446059E+01

(000)	(020)	9 2	10 4	4120.44	1638.69	.563315E-01	.446623E+01
(010)	(110)	6 0	6 6	4120.74	2283.60	.175275E-06	.306058E-03
(000)	(001)	9 -4	8 3	4121.69	1217.27	.197121E-01	.207132E+00
(000)	(100)	9 -3	8 7	4121.98	1283.24	.823984E-06	.395963E-05
(000)	(100)	8 -7	7 5	4122.71	744.13	.370020E-05	.134051E-05
(000)	(001)	5 0	6 3	4122.76	504.58	.143961E+02	.496112E+01
(010)	(110)	8 -7	8 -1	4123.16	2337.94	.220080E-05	.168393E-02
(000)	(001)	8 -4	9 -1	4124.76	982.95	.939365E+01	.320694E+02
(000)	(100)	6 -5	7 1	4128.67	447.25	.237395E-01	.206863E-02
(000)	(110)	9 6	8 -6	4129.67	2022.04	.105527E-07	.324625E-05
(000)	(001)	4 -4	5 3	4129.68	222.03	.168438E+02	.149513E+01
(010)	(110)	6 -1	6 5	4131.59	2272.74	.512092E-06	.282199E-03
(000)	(001)	10 2	10 5	4132.50	1884.06	.116046E-02	.297507E+00
(000)	(001)	10 1	10 6	4132.96	1883.60	.604622E-02	.515494E+00
(010)	(110)	7 -7	8 -3	4132.98	2180.84	.118520E-03	.420230E-01
(000)	(001)	9 -7	9 0	4133.95	1079.23	.247561E-02	.446004E-02
(000)	(001)	6 0	7 3	4135.37	662.20	.557699E+01	.407969E+01
(000)	(020)	8 5	8 7	4135.41	1598.74	.229770E-01	.499570E+00
(000)	(020)	3 6	8 8	4135.42	1598.74	.765897E-02	.499568E+00
(000)	(001)	9 3	9 6	4135.89	1638.83	.526285E-01	.138662E+01
(000)	(020)	7 -6	7 4	4135.90	586.46	.223556E-03	.113721E-03
(000)	(001)	9 2	9 7	4136.03	1638.69	.175562E-01	.138669E+01
(000)	(100)	8 -4	9 0	4136.20	982.95	.195283E-01	.664678E-01
(000)	(001)	8 -3	7 6	4138.89	1007.08	.105855E+01	.134774E+01
(000)	(001)	8 4	8 7	4139.90	1417.81	.637320E-01	.174402E+01
(000)	(001)	8 3	8 8	4139.92	1417.79	.948228E-01	.864854E+00
(000)	(020)	10 -2	10 4	4141.00	1618.13	.397270E-03	.282994E-01
(000)	(020)	9 -4	10 2	4141.66	1217.27	.798953E-02	.835483E-01
(000)	(100)	9 -8	8 4	4141.63	920.16	.101748E-05	.256007E-05
(000)	(110)	9 4	8 -8	4143.30	1820.70	.339606E-07	.623887E-05
(010)	(110)	4 0	5 4	4143.46	1923.05	.123895E-05	.381910E-03
(000)	(100)	9 -7	10 -3	4145.03	1079.23	.779854E-01	.140121E+00
(000)	(100)	8 2	8 8	4145.21	1260.01	.192196E-04	.246484E-03
(010)	(110)	5 -5	5 5	4145.69	1920.83	.737304E-07	.749365E-05
(000)	(100)	8 1	8 7	4145.93	1259.29	.581858E-04	.247836E-03
(000)	(001)	7 -7	8 -4	4146.29	586.22	.415559E+02	.702065E+01
(000)	(100)	9 1	9 7	4147.56	1481.97	.760184E-04	.941441E-03
(000)	(001)	6 -1	7 2	4147.58	649.73	.305216E+02	.698982E+01
(000)	(020)	8 -4	7 6	4148.06	982.95	.114963E-04	.390274E-04
(000)	(100)	10 0	10 6	4148.43	1729.71	.170910E-04	.216885E-02
(010)	(110)	3 -4	6 2	4149.11	1922.94	.440183E-05	.135432E-02
(000)	(100)	9 0	9 6	4149.78	1479.75	.260392E-04	.956684E-03
(000)	(001)	7 -1	8 2	4150.64	842.97	.126837E+02	.733241E+01
(000)	(100)	6 -3	7 3	4150.81	553.13	.336383E-01	.484326E-02
(010)	(110)	7 -5	8 -1	4151.21	2309.89	.824538E-04	.540401E-01
(000)	(001)	8 -6	9 -3	4152.54	682.98	.570835E+01	.119767E+02
(000)	(001)	7 -4	8 -1	4153.28	709.84	.649152E+01	.594156E+01
(000)	(100)	6 -4	6 6	4153.62	542.89	.504483E-04	.207857E-04
(000)	(100)	10 -1	10 5	4154.12	1724.02	.572089E-04	.225779E-02
(000)	(001)	5 -4	5 5	4155.76	326.63	.410753E+02	.598272E+01
(000)	(100)	8 -8	8 2	4155.90	744.03	.319100E-04	.343876E-04
(000)	(001)	10 -2	9 7	4156.59	1618.13	.128424E-02	.914595E-01
(010)	(110)	4 -1	5 5	4158.33	1908.19	.343388E-05	.327390E-03
(000)	(020)	5 -3	6 5	4160.29	399.43	.219258E-02	.150756E-03
(000)	(100)	9 -8	10 -6	4161.08	920.16	.252819E-01	.683152E-01
(000)	(100)	9 -9	10 -5	4161.12	920.12	.236027E-01	.196993E-01
(000)	(100)	9 -5	10 -1	4161.60	1202.07	.486236E-01	.156821E+00
(000)	(001)	9 -9	9 -2	4162.12	920.12	.560992E-01	.418038E-01
(000)	(100)	9 -1	9 5	4162.44	1362.21	.257639E-02	.179039E-01
(000)	(020)	9 -1	9 5	4162.44	1362.21	.119950E-02	.833559E-02
(000)	(100)	7 -5	7 5	4162.61	704.23	.364974E-03	.108153E-03
(000)	(001)	7 -6	8 -3	4163.06	586.46	.138958E+02	.702258E+01
(000)	(100)	4 -4	5 4	4164.93	222.03	.202853E-03	.178537E-04
(000)	(020)	5 -7	8 3	4165.14	744.13	.856596E-03	.307166E-03
(000)	(110)	8 7	8 -7	4165.83	1798.24	.119113E-03	.669129E-07
(000)	(001)	10 -8	10 -1	4165.83	1298.23	.108338E-01	.162123E+00

(000)	(001)	8 -2	9 1	4165.97	1050.64	.283275E+01	.132465E+02
(000)	(100)	10 -9	9 3	4167.20	1114.48	.152893E-05	.323570E-05
(000)	(001)	8 -4	8 3	4167.48	982.93	.100659E+00	.340121E+00
(000)	(001)	9 -3	9 2	4167.55	1202.07	.401851E-01	.129420E+00
(000)	(001)	9 -3	10 -2	4167.66	1202.07	.105407E+02	.339466E+02
(010)	(110)	5 -1	6 3	4169.45	2054.20	.937863E-05	.179601E-02
(000)	(020)	10 6	9 8	4170.75	2269.59	.716649E-04	.115606E+00
(000)	(020)	10 5	9 9	4170.75	2269.59	.214994E-03	.115605E+00
(000)	(020)	9 -9	10 -1	4172.04	920.12	.589433E-01	.490711E-01
(000)	(001)	5 -5	6 2	4173.25	325.33	.404834E+02	.194510E+01
(000)	(110)	8 7	7 -5	4173.49	1798.24	.121968E-07	.683908E-06
(000)	(001)	7 -3	7 4	4174.05	782.45	.341704E-01	.146932E-01
(000)	(001)	7 -2	8 1	4174.99	817.56	.590537E+01	.901254E+01
(000)	(020)	10 -3	10 3	4175.08	1584.04	.154503E-02	.310088E-01
(000)	(001)	5 3	6 6	4175.97	611.56	.200425E+02	.379633E+01
(000)	(001)	10 -6	10 1	4176.02	1438.35	.121689E-02	.364260E-01
(000)	(001)	5 2	6 5	4176.20	611.33	.157157E+01	.892001E+00
(000)	(001)	10 -9	10 -4	4178.29	1114.48	.155826E-01	.328902E-01
(000)	(100)	8 -6	8 4	4178.86	882.98	.134146E-03	.279900E-03
(000)	(020)	6 -4	7 4	4179.47	542.89	.267743E-02	.109369E-02
(000)	(001)	6 -5	6 4	4180.14	447.25	.274998E-01	.236678E-02
(000)	(020)	8 0	8 6	4181.66	1133.84	.125998E-02	.874735E-02
(010)	(110)	6 -6	6 4	4181.84	2041.91	.448546E-07	.242224E-04
(000)	(100)	10 -5	9 7	4182.28	1447.25	.203002E-05	.211083E-04
(010)	(110)	8 -7	9 -5	4182.31	2337.94	.927693E-04	.690371E-01
(000)	(001)	6 -2	6 5	4184.67	602.86	.319712E+01	.173890E+01
(000)	(001)	9 -3	10 0	4184.90	1283.24	.490245E+01	.232044E+02
(000)	(100)	5 1	6 5	4187.11	509.49	.131582E-01	.152307E-02
(000)	(100)	9 -4	8 8	4187.95	1217.27	.272215E-06	.281515E-05
(000)	(100)	7 -6	8 0	4189.58	586.46	.673833E-02	.339397E-02
(000)	(100)	7 -4	8 2	4190.09	709.84	.124449E-01	.112905E-01
(000)	(020)	8 -1	8 5	4190.52	1124.98	.412606E-02	.913182E-02
(000)	(001)	10 -3	9 6	4190.68	1584.04	.196033E-03	.379977E-02
(000)	(100)	5 0	6 6	4191.93	504.53	.454366E-02	.153998E-02
(010)	(110)	8 -8	9 -4	4194.28	2337.73	.300721E-04	.666783E-01
(000)	(001)	9 -1	8 8	4195.50	1362.21	.113285E+00	.798968E+00
(010)	(110)	6 -2	7 2	4196.37	2211.51	.499655E-05	.606374E-02
(000)	(001)	8 -3	9 -2	4196.39	885.85	.943083E+01	.662235E+01
(000)	(001)	6 2	7 5	4197.13	759.38	.383643E+01	.446378E+01
(000)	(001)	10 4	10 7	4197.27	2066.31	.295321E-02	.173785E+01
(000)	(001)	10 3	10 8	4197.30	2066.48	.886129E-02	.178792E+01
(000)	(020)	7 1	7 7	4197.87	933.15	.289274E-02	.254749E-02
(000)	(001)	6 1	7 4	4198.16	758.34	.511654E+01	.194866E+01
(010)	(110)	5 -2	6 4	4199.32	2024.43	.238963E-05	.118176E-02
(000)	(020)	9 -8	9 2	4200.89	920.16	.241440E-03	.596924E-03
(000)	(020)	7 0	7 6	4201.29	929.72	.999504E-03	.259553E-02
(000)	(001)	7 -7	6 6	4201.31	586.22	.226837E+02	.877376E+01
(000)	(100)	9 -9	9 1	4201.57	920.12	.550655E-04	.455164E-04
(000)	(001)	9 4	9 9	4202.04	1820.70	.797529E-02	.148398E+01
(000)	(001)	9 3	9 8	4202.04	1820.70	.122918E-01	.762369E+00
(000)	(100)	9 -7	9 3	4202.45	1079.23	.276186E-03	.489465E-03
(000)	(100)	6 0	7 4	4204.63	662.20	.342683E-02	.606288E-02
(000)	(020)	7 -3	8 3	4205.04	704.23	.134167E-01	.393567E-02
(000)	(020)	10 0	9 6	4205.79	1729.71	.391283E-04	.470283E-02
(000)	(001)	8 -8	9 -5	4206.01	744.03	.643094E+01	.684770E+01
(000)	(001)	8 -3	9 0	4206.10	1007.03	.901228E+01	.112911E+02
(000)	(001)	4 -2	5 5	4206.90	273.49	.341751E-01	.384791E-02
(000)	(100)	9 3	9 9	4206.98	1638.83	.109545E-04	.283742E-03
(000)	(100)	9 2	9 8	4207.12	1638.69	.365915E-05	.284133E-03
(000)	(100)	5 -5	6 3	4207.71	325.33	.240079E-02	.114406E-03
(000)	(001)	10-10	10 -3	4209.80	1114.46	.606024E-01	.382088E+00
(000)	(100)	8 -4	8 6	4209.98	982.95	.828989E-04	.277283E-03
(000)	(001)	7 -6	7 3	4211.11	586.46	.340073E+01	.169903E+01
(000)	(020)	10 -1	9 7	4211.48	1724.02	.124461E-03	.484504E-02
(000)	(001)	8 -8	7 3	4212.48	744.03	.370421E+00	.606454E+00
(000)	(110)	8 3	7 -7	4212.74	1598.74	.719483E-07	.153550E-05

(000)	(001)	9 -7	10 -4	4213.54	1079.23	.562645E+01	.994510E+01
(000)	(100)	10 2	10 8	4214.19	1884.06	.392839E-05	.987598E-03
(000)	(001)	9 -2	8 7	4214.31	1343.40	.346135E-04	.651263E-03
(000)	(100)	10 1	10 7	4214.65	1883.60	.118663E-04	.992096E-03
(000)	(100)	10 -6	10 4	4215.02	1438.35	.127978E-03	.379569E-02
(000)	(001)	8 -7	9 -4	4215.16	744.13	.193209E+02	.684606E+01
(000)	(100)	7 -3	7 7	4215.74	782.45	.750472E-04	.319509E-04
(000)	(100)	6 -1	7 5	4217.11	649.73	.269525E-01	.607068E-02
(000)	(001)	7 1	8 4	4217.32	933.15	.716020E+01	.627655E+01
(010)	(110)	6 -5	7 1	4217.66	2042.91	.919332E-05	.164869E-02
(000)	(100)	7 -1	8 3	4218.84	842.97	.290281E-01	.165072E-01
(000)	(001)	7 0	8 3	4220.71	929.72	.126522E+01	.327033E+01
(000)	(110)	9 9	8 -1	4222.57	2238.53	.768031E-08	.351471E-05
(010)	(110)	7 -6	6 6	4223.03	2161.31	.927886E-10	.968117E-07
(000)	(001)	6 -6	7 1	4223.82	446.67	.580714E+01	.147906E+01
(010)	(110)	7 -3	8 1	4226.11	2393.01	.183691E-04	.178082E-01
(010)	(110)	7 -7	7 3	4227.60	2180.84	.907302E-07	.314565E-04
(000)	(100)	10 -2	9 8	4227.68	1618.13	.425088E-07	.297644E-05
(000)	(001)	5 -3	6 4	4227.96	399.43	.353082E+00	.238884E-01
(000)	(001)	9 -9	8 4	4230.35	920.12	.220183E+01	.180762E+01
(000)	(100)	10 -7	9 5	4230.70	1293.92	.439460E-04	.216563E-03
(000)	(020)	10 -7	9 5	4230.73	1293.92	.308743E-04	.152147E-03
(000)	(100)	8 -2	9 2	4230.90	1050.64	.855347E-02	.393839E-01
(000)	(020)	5 -4	6 6	4233.09	326.63	.235396E-03	.336596E-04
(000)	(100)	10 -8	10 2	4233.40	1293.23	.443295E-04	.652784E-03
(000)	(001)	6 -3	6 6	4234.40	553.13	.649142E+01	.916319E+00
(000)	(020)	9 -6	8 6	4234.85	1080.65	.144233E-04	.766174E-04
(000)	(100)	8 -3	9 1	4235.84	885.85	.235654E-01	.196718E-01
(000)	(001)	8 0	9 3	4235.99	1133.84	.121053E+01	.829623E+01
(000)	(020)	8 -6	9 2	4238.07	882.98	.456775E-02	.939760E-02
(000)	(100)	6 2	7 6	4238.81	759.38	.472367E-03	.544256E-03
(000)	(100)	6 1	7 7	4239.85	758.34	.146262E-02	.551567E-03
(000)	(001)	9 -4	10 -1	4241.79	1217.27	.132440E+01	.135226E+02
(000)	(110)	9 8	8 0	4241.86	2238.53	.210744E-03	.288010E-05
(000)	(100)	9 -3	10 1	4242.87	1293.24	.190262E-01	.888247E-01
(000)	(001)	9 -6	10 -3	4243.61	1080.65	.130959E+01	.694225E+01
(000)	(020)	10 -9	10 1	4244.03	1114.48	.452232E-03	.939740E-03
(000)	(100)	7 -2	8 4	4244.28	817.56	.103390E-01	.155214E-01
(000)	(001)	8 -1	9 2	4244.64	1124.98	.227698E+01	.497517E+01
(000)	(020)	8 -5	7 7	4245.17	685.85	.204320E-04	.141825E-04
(000)	(001)	7 -4	7 5	4246.67	709.84	.519904E-02	.465393E-02
(010)	(110)	6 -3	7 3	4246.77	2161.67	.798253E-05	.251258E-02
(010)	(110)	4 -4	5 4	4249.04	1817.47	.289196E-07	.523983E-05
(000)	(100)	6 -3	6 5	4249.26	447.25	.361377E-04	.305962E-05
(000)	(001)	8 -7	8 2	4249.48	744.13	.151477E-01	.532400E-02
(000)	(110)	10 2	9 -8	4250.06	1884.06	.119615E-06	.298175E-04
(010)	(110)	8 -7	7 5	4250.80	2237.94	.667194E-09	.488513E-06
(000)	(020)	9 1	8 7	4252.18	1481.97	.878225E-04	.106087E-02
(000)	(001)	9 -1	10 2	4252.94	1362.21	.171719E+01	.116792E+02
(000)	(100)	8 -8	7 6	4254.16	744.03	.434083E-06	.456987E-06
(000)	(020)	9 0	8 8	4254.41	1479.75	.299663E-04	.107389E-02
(000)	(001)	6 -4	7 3	4254.65	542.80	.184912E+00	.741983E-01
(000)	(001)	6 4	7 7	4254.71	691.26	.410718E+00	.875787E+00
(000)	(001)	6 3	7 6	4254.74	691.23	.497691E+01	.353694E+01
(000)	(110)	10 4	10-10	4255.32	2066.51	.297508E-07	.177652E-04
(000)	(001)	10-10	9 3	4255.37	1114.46	.100244E+00	.623818E+00
(000)	(100)	10-10	10 9	4255.76	1114.46	.651562E-05	.405026E-04
(000)	(100)	6 -6	7 2	4257.06	446.67	.136640E-02	.345463E-03
(000)	(001)	4 -3	5 4	4257.53	224.85	.929040E+02	.270260E+01
(010)	(110)	6 -4	6 6	4258.03	2146.31	.304425E-08	.266347E-05
(000)	(001)	9 -7	8 6	4259.73	1079.23	.188302E-03	.329227E-03
(000)	(100)	7 1	8 5	4259.78	933.15	.212071E-02	.184047E-02
(000)	(100)	8 -7	9 -1	4260.39	744.13	.105989E-01	.371569E-02
(000)	(100)	10 4	10 10	4261.44	2066.51	.159211E-05	.949337E-03
(000)	(100)	10 3	10 9	4261.47	2066.48	.477686E-05	.949299E-03
(000)	(001)	10 -4	10 3	4261.49	1538.38	.158933E-02	.753192E-01

(000)	(100)	10 -3	9 9	4261.77	1584.04	.154127E-06	.303041E-05	
(000)	(110)	10 6	9 -4	4262.42	2269.59	.153812E-07	.242784E-04	
(000)	(001)	8 -6	7 7	4262.99	882.98	.257666E-04	.527019E-04	
(000)	(100)	7 0	8 6	4263.21	929.72	.753350E-03	.152784E-02	
(000)	(001)	10 -8	9 5	4263.61	1293.23	.729728E-04	.106696E-02	
(000)	(001)	9 -9	10 -6	4264.27	920.12	.822695E+01	.670029E+01	
(000)	(001)	8 -5	8 4	4264.62	883.85	.366842E+00	.253476E+00	
(000)	(001)	9 -8	10 -5	4268.76	920.16	.275376E+01	.672734E+01	
(000)	(001)	9 -2	10 1	4270.97	1343.40	.385732E+00	.716137E+01	
(000)	(001)	10 6	10 9	4271.49	2269.59	.728301E-03	.114746E+01	
(000)	(001)	10 5	10 10	4271.49	2269.59	.111895E-02	.587486E+00	
(000)	(100)	9 -9	8 3	4272.81	920.12	.397565E-05	.323142E-05	
(010)	(110)	5 1	6 5	4273.14	2131.19	.109215E-05	.295192E-03	
(000)	(001)	9 -3	9 4	4273.59	1283.24	.222607E-01	.103178E+00	
(000)	(100)	8 -3	9 3	4274.60	1007.08	.257415E-01	.317336E-01	
(000)	(020)	6 -5	7 5	4275.12	447.25	.208501E-02	.175461E-03	
(000)	(110)	7 6	6 -6	4275.61	1400.82	.879341E-08	.214888E-06	
(000)	(001)	7 3	8 6	4275.73	1063.23	.111457E+01	.179804E+01	
(000)	(001)	7 2	8 5	4275.92	1063.04	.843274E+00	.407727E+01	
(010)	(110)	5 0	6 6	4277.24	2127.10	.351407E-06	.279202E-03	
(000)	(020)	8 0	9 4	4277.50	1133.84	.816480E-02	.554136E-01	
(000)	(100)	8 0	9 4	4277.50	1133.84	.614896E-03	.417323E-02	
(010)	(110)	7 -5	7 5	4278.85	2309.89	.199320E-07	.126738E-04	
(000)	(020)	9 -7	10 1	4279.28	1079.23	.979719E-02	.170511E-01	
(000)	(100)	7 -6	7 4	4280.37	586.46	.243524E-04	.119698E-04	
(000)	(110)	9 9	9 -5	4281.72	2239.53	.207492E-09	.364425E-06	
(000)	(110)	10 4	9 -6	4283.12	2066.51	.542889E-07	.322073E-04	
(010)	(110)	8 -8	8 2	4283.50	2337.73	.698489E-08	.152104E-04	
(000)	(001)	8 -2	8 5	4288.32	1050.64	.177973E-02	.608494E-02	
(000)	(100)	7 -4	7 6	4288.35	709.84	.185673E-04	.164590E-04	
(000)	(001)	7 -7	8 0	4288.93	586.22	.783147E+01	.127908E+01	
(000)	(001)	9 -6	9 3	4289.18	1080.65	.341946E-02	.179343E-01	
(000)	(001)	7 -5	8 2	4289.38	704.23	.481414E+00	.138441E+00	
(000)	(100)	9 -6	10 0	4289.57	1089.65	.518112E-02	.271713E-01	
(000)	(100)	9 -1	10 3	4291.13	1362.21	.115788E-02	.780508E-02	
(000)	(110)	9 7	8 -3	4291.78	2022.04	.554164E-07	.883653E-05	
(000)	(001)	10 0	9 9	4293.03	1729.71	.702612E-05	.827219E-03	
(000)	(110)	10 6	10 -3	4293.33	2269.59	.399223E-08	.625617E-05	
(000)	(001)	9 -8	9 1	4296.45	920.16	.333677E+00	.809321E+00	
(000)	(001)	8 2	9 5	4296.63	1260.01	.231911E+00	.286921E+01	
(000)	(100)	10-10	9 4	4296.68	1114.46	.200877E-05	.123675E-04	
(000)	(020)	10-10	9 4	4296.88	1114.46	.298656E-05	.183875E-04	
(000)	(100)	5 -3	6 5	4297.08	899.43	.722433E-03	.480913E-04	
(000)	(001)	8 1	9 4	4297.54	1259.29	.136630E+01	.561482E+01	
(000)	(001)	10 -1	9 8	4298.72	1724.02	.258874E-01	.987298E+00	
(010)	(110)	7 -6	8 0	4299.08	2161.31	.110755E-05	.113513E-02	
(000)	(110)	9 7	10 -9	4299.60	2022.04	.883257E-09	.140579E-06	

(000)	(001)	5	-4	6	3	4300.71	326.63	.732081E+01	.103036E+01
(010)	(110)	7	-4	8	2	4302.20	2319.03	.185386E-05	.367868E-02
(010)	(110)	5	-5	6	3	4302.82	1920.83	.158338E-06	.155010E-04
(000)	(001)	7	-1	7	6	4303.00	842.97	.119702E+01	.667829E+00
(010)	(110)	6	0	7	4	4305.12	2283.60	.625587E-06	.104559E-02
(000)	(100)	8	-5	8	5	4307.08	885.85	.159310E-03	.108993E-03
(000)	(100)	9	-4	10	2	4309.36	1217.27	.547920E-02	.550675E-01
(000)	(100)	9	-2	10	4	4309.97	1343.40	.541509E-03	.996251E-02
(000)	(100)	7	-7	8	1	4312.89	585.22	.420075E-02	.682279E-03
(000)	(110)	9	5	9	-9	4313.38	1820.70	.897298E-07	.542175E-05
(010)	(110)	6	-1	7	5	4316.00	2272.74	.164760E-05	.869151E-03
(000)	(100)	8	-7	8	3	4317.68	744.13	.711310E-04	.246057E-04
(000)	(110)	8	8	7	-2	4317.71	1798.24	.105220E-07	.171086E-05
(000)	(001)	9	1	10	4	4317.94	1481.97	.357722E+00	.425535E+01
(000)	(001)	9	0	10	3	4320.12	1479.75	.197624E+00	.697445E+01
(000)	(020)	10	-6	10	4	4320.78	1438.35	.197542E-03	.571548E-02
(000)	(001)	10	-7	10	2	4321.23	1293.92	.204880E-01	.988494E-01
(000)	(100)	9	-5	9	5	4322.58	1202.07	.824986E-03	.256166E-02
(000)	(020)	9	-5	9	5	4322.58	1202.07	.405453E-03	.125897E-02
(000)	(020)	7	-6	8	4	4322.83	586.46	.103678E-02	.504593E-03
(000)	(100)	6	-4	7	4	4323.94	542.89	.897568E-03	.354392E-03
(000)	(110)	9	9	10	-7	4324.86	2238.53	.959814E-10	.428848E-07
(000)	(110)	9	3	8	-7	4325.24	1638.83	.391452E-06	.986217E-05
(000)	(100)	9	-7	8	7	4325.99	1079.23	.234465E-06	.403659E-06
(000)	(110)	9	7	9	-7	4326.60	2022.04	.130004E-07	.205631E-05
(000)	(001)	7	-2	7	7	4328.41	817.56	.207146E+01	.304933E+01
(000)	(100)	9	-6	9	4	4330.69	1080.65	.762003E-04	.395822E-03
(000)	(020)	9	-6	9	4	4330.69	1080.65	.130562E-03	.678203E-03
(000)	(001)	8	-3	8	6	4331.83	1007.08	.496889E-02	.604455E-02
(000)	(020)	8	-4	8	6	4332.55	982.95	.226603E-03	.736507E-03
(000)	(110)	9	3	8	-5	4333.11	1820.70	.185928E-06	.111832E-04
(000)	(020)	7	7	8	7	4333.33	1400.82	.662459E+00	.532135E+01
(000)	(020)	7	6	8	8	4333.34	1400.82	.220320E+00	.532134E+01
(000)	(001)	8	-6	9	1	4333.63	882.98	.822406E-01	.165469E+00
(000)	(110)	8	8	9	-8	4333.88	1798.24	.129547E-09	.209760E-07
(000)	(100)	10	-8	9	6	4336.30	1293.23	.217460E-06	.312626E-05
(000)	(001)	10	-6	9	7	4336.37	1436.35	.648100E-02	.186841E+00
(000)	(001)	7	3	8	8	4336.65	1221.06	.971805E+00	.329447E+01
(000)	(001)	7	4	8	7	4336.66	1221.05	.845918E-01	.860271E+00
(000)	(020)	8	6	9	6	4336.76	1598.74	.872898E-01	.542928E+01
(000)	(020)	8	5	9	7	4336.76	1598.74	.261872E+00	.542933E+01
(000)	(020)	9	5	10	5	4339.52	1820.70	.937264E-01	.562912E+01
(000)	(020)	9	4	10	6	4339.52	1820.70	.312433E-01	.562934E+01
(000)	(001)	9	-4	9	5	4339.57	1217.27	.763923E-01	.762419E+00
(000)	(100)	10	-4	10	6	4339.76	1538.33	.585375E-05	.272409E-03
(000)	(001)	6	-6	6	5	4340.86	446.67	.246419E+02	.610986E+01
(000)	(001)	5	-1	6	6	4340.89	446.64	.935271E+01	.772873E+00
(000)	(100)	9	-8	10	-2	4341.15	920.16	.126620E-02	.303949E-02
(000)	(100)	7	3	8	7	4341.99	1063.23	.143033E-04	.227230E-04
(000)	(100)	7	2	8	8	4342.18	1063.04	.482218E-05	.229597E-04
(000)	(100)	9	-3	9	7	4346.29	1283.24	.140238E-04	.639130E-04
(000)	(020)	7	-3	7	7	4348.57	782.45	.258760E-03	.106801E-03
(000)	(001)	6	-5	7	2	4350.06	447.25	.184034E+02	.152203E+01
(000)	(001)	10	-5	10	4	4352.66	1447.25	.317904E-02	.317621E-01
(000)	(110)	8	8	8	-6	4353.47	1798.24	.240154E-08	.387282E-06
(000)	(001)	6	-2	7	3	4353.65	602.86	.623665E+00	.326052E+00
(000)	(001)	10	-9	10	0	4353.66	1114.48	.214242E-02	.433984E-02

(000)	(100)	8 -2	8 8	4354.58	1050.64	.195050E-05	.872588E-05
(000)	(001)	9 -5	8 8	4355.64	1202.07	.354248E+00	.109162E+01
(000)	(001)	8 4	9 7	4356.91	1417.81	.142354E+00	.370148E+01
(000)	(001)	8 3	9 6	4356.93	1417.79	.190050E+00	.164706E+01
(000)	(100)	7 -5	8 3	4357.58	704.23	.447202E-02	.126760E-02
(000)	(100)	10 -7	10 3	4359.42	1293.92	.214696E-03	.102678E-02
(000)	(100)	9 -8	9 2	4361.38	920.16	.144975E-04	.346396E-04
(010)	(110)	6 -5	6 5	4361.42	2042.91	.182830E-09	.317073E-07
(000)	(110)	8 7	7 -1	4362.02	1798.24	.192273E-07	.103153E-05
(000)	(001)	8 -8	9 -1	4363.68	744.03	.796423E+00	.817394E+00
(000)	(110)	9 6	8 -2	4364.29	2022.04	.669126E-08	.314772E-05
(000)	(110)	8 6	8 -8	4365.26	1598.74	.201414E-07	.124458E-05
(010)	(110)	6 -6	7 2	4365.97	2041.91	.262377E-07	.135713E-04
(000)	(110)	10 5	9 -3	4367.57	2269.59	.437614E-08	.224707E-05
(000)	(001)	7 -3	8 4	4368.02	782.45	.130209E+01	.535032E+00
(000)	(100)	8 2	9 6	4369.52	1260.01	.683151E-06	.831138E-05
(000)	(100)	5 -4	6 6	4369.88	326.63	.574954E-04	.796401E-05
(000)	(100)	8 1	9 7	4370.24	1259.29	.236006E-05	.953649E-05
(000)	(001)	7 -7	7 4	4370.28	586.22	.147068E-02	.235729E-03
(000)	(001)	5 -2	6 5	4371.13	416.40	.322058E-02	.685870E-03
(000)	(020)	6 2	7 6	4371.63	759.38	.699619E-02	.771477E-02
(000)	(020)	6 1	7 7	4372.68	758.34	.212061E-01	.775407E-02
(000)	(100)	8 -8	9 0	4375.12	744.03	.989587E-03	.101299E-02
(000)	(020)	8 -7	9 3	4377.04	744.13	.307745E-02	.105012E-02
(000)	(110)	8 6	7 -4	4377.39	1598.74	.505232E-07	.311329E-05
(000)	(001)	9 3	10 6	4377.73	1638.83	.198101E+00	.493108E+01
(000)	(001)	9 2	10 5	4377.87	1638.69	.328668E-01	.245261E+01
(000)	(020)	7 1	8 5	4382.35	933.15	.802981E-01	.255588E-01
(000)	(020)	7 0	8 6	4383.78	929.72	.104172E-01	.259130E-01
(000)	(001)	8 -4	9 3	4386.88	982.95	.173402E+00	.563031E+00
(000)	(020)	8 -8	7 6	4386.98	744.03	.118221E-05	.120689E-05
(000)	(001)	9 -7	10 0	4388.91	1079.23	.751554E-01	.127534E+00
(000)	(020)	10 6	10 8	4390.78	2269.59	.697646E-03	.106901E+01
(000)	(020)	10 5	10 7	4390.78	2269.59	.209292E-02	.106900E+01
(010)	(110)	8 -7	9 -1	4393.75	2337.94	.513207E-06	.363540E-03
(000)	(110)	8 4	7 -6	4393.85	1417.81	.992745E-07	.255963E-05
(010)	(110)	6 1	7 7	4394.32	2399.96	.191775E-06	.182869E-03
(000)	(100)	6 -2	7 6	4395.33	602.86	.435483E-04	.225504E-04
(000)	(020)	9 -9	8 5	4395.38	920.12	.824525E-05	.651489E-05
(000)	(100)	9 1	10 5	4396.17	1481.97	.200293E-05	.234023E-04
(000)	(020)	9 -1	10 3	4396.91	1362.21	.151191E-01	.994632E-01
(000)	(020)	10 -4	9 6	4397.12	1538.38	.757345E-05	.348069E-03
(000)	(100)	8 -3	8 7	4398.14	1007.08	.695111E-05	.832848E-05
(000)	(100)	9 0	10 6	4398.39	1479.75	.431105E-06	.149436E-04
(000)	(001)	10 -2	10 5	4398.43	1618.13	.570900E-02	.384223E+00
(000)	(100)	8 -6	9 2	4398.56	682.98	.147536E-02	.292462E-02
(000)	(100)	8 -1	9 5	4399.67	1124.98	.269823E-01	.568785E-01
(000)	(020)	8 -1	9 5	4399.67	1124.98	.223311E-02	.470739E-02
(010)	(110)	7 -3	7 7	4401.27	2393.01	.547626E-09	.504284E-06
(000)	(001)	8 -7	7 6	4401.84	744.13	.111474E+02	.378240E+01
(000)	(001)	6 -3	7 4	4403.37	553.13	.176588E-01	.239703E-02
(010)	(110)	5 -3	6 5	4403.48	2000.85	.154030E-08	.217378E-06
(000)	(001)	7 -6	8 1	4406.09	586.46	.208535E+01	.995750E+00
(000)	(001)	8 -8	8 3	4406.40	744.03	.195464E+01	.198666E+01
(010)	(110)	7 -6	7 4	4407.41	2181.31	.113440E-11	.113407E-08
(000)	(100)	10 -6	9 8	4407.46	1438.35	.157470E-07	.446650E-06
(000)	(110)	10 -1	9 -9	4410.06	1724.02	.194780E-08	.724103E-07
(000)	(100)	7 -3	8 3	4410.48	782.45	.461242E-03	.187701E-03
(000)	(110)	7 7	7 -7	4410.66	1400.82	.206192E-07	.162725E-06
(000)	(100)	10 -9	10 1	4411.63	1114.48	.183825E-04	.367478E-04
(000)	(100)	7 -7	7 7	4411.97	586.22	.981860E-05	.155891E-05
(000)	(100)	9 -4	9 6	4412.26	1217.27	.552417E-05	.542247E-04
(000)	(001)	9 -1	9 6	4412.51	1362.21	.116930E-02	.766526E-02
(000)	(001)	9 -5	10 2	4413.08	1202.07	.258765E+00	.787011E+00
(000)	(020)	9 -2	10 4	4413.73	1343.40	.568905E-02	.102159E+00
(000)	(110)	7 7	6 -3	4416.18	1400.82	.659163E-07	.519554E-06

(000)	(020)	9 7	9 9	4418.30	2022.04	.423716E-02	.656297E+00	
(000)	(020)	9 6	9 8	4418.30	2022.04	.141238E-02	.656295E+00	
(000)	(001)	9 -8	8 5	4418.80	920.16	.238725E+00	.562987E+00	
(000)	(100)	6 -5	7 5	4419.59	447.25	.447409E-03	.364202E-04	
(000)	(020)	7 -4	7 6	4421.17	709.84	.581626E-04	.500094E-04	
(000)	(001)	8 0	8 7	4423.87	1133.84	.370903E+00	.243399E+01	
(000)	(001)	8 6	9 9	4424.00	1598.74	.138434E-01	.844054E+00	
(000)	(001)	8 5	9 8	4424.00	1598.74	.151155E+00	.307206E+01	
(000)	(100)	8 4	9 8	4428.00	1417.81	.255944E-05	.654819E-04	
(000)	(100)	8 3	9 9	4428.02	1417.79	.769597E-05	.656259E-04	
(000)	(100)	8 -4	9 4	4428.39	982.95	.234118E-03	.903459E-03	
(000)	(020)	8 -4	9 4	4428.39	982.95	.116643E-02	.370910E-02	
(000)	(020)	8 -5	8 5	4429.65	885.85	.381642E-03	.253878E-03	
(000)	(020)	10 0	10 6	4430.51	1729.71	.312571E-03	.356586E-01	
(000)	(100)	10 -5	10 5	4430.89	1447.25	.201033E-04	.197308E-03	
(000)	(001)	9 -2	9 7	4431.32	1343.40	.421383E-03	.754017E-02	
(000)	(001)	10 -3	10 6	4432.52	1584.04	.128893E-01	.243665E+00	
(000)	(001)	8 -1	8 8	4432.73	1124.98	.527533E+00	.110374E+01	
(000)	(020)	10 -1	10 5	4436.20	1724.02	.994875E-03	.367669E-01	
(000)	(110)	10 1	10 -9	4438.24	1833.60	.597960E-06	.474762E-04	
(010)	(110)	7 -7	8 1	4438.28	2180.84	.966225E-09	.319022E-06	
(000)	(020)	9 -8	10 2	4438.77	920.16	.748637E-03	.175757E-02	
(000)	(001)	7 -4	8 3	4440.59	709.84	.519027E-02	.444318E-02	
(000)	(001)	7 -5	7 6	4441.74	704.23	.253940E+01	.710767E+00	
(000)	(001)	10 -9	9 4	4442.35	1114.48	.927957E+00	.184221E+01	
(010)	(110)	6 -4	7 4	4442.41	2146.31	.121001E-09	.101471E-06	
(000)	(001)	9 5	10 8	4443.08	1820.70	.235031E-01	.149599E+01	
(000)	(001)	9 4	10 7	4443.08	1820.70	.189981E-01	.334325E+01	
(000)	(100)	9 -9	10 -1	4443.55	920.12	.156820E-02	.122566E-02	
(000)	(100)	6 -3	7 7	4445.06	553.13	.125143E-03	.168278E-04	
(000)	(100)	9 -7	10 1	4446.38	1079.23	.299201E-02	.501106E-02	
(000)	(100)	8 -8	8 6	4448.90	744.63	.103201E-04	.103889E-04	
(000)	(001)	9 -9	9 2	4449.50	920.12	.113927E-02	.889232E-03	
(000)	(001)	9 -9	10 -2	4449.61	920.12	.833451E+00	.652077E+00	
(000)	(020)	9 -3	8 7	4450.91	1283.24	.962929E-05	.428536E-04	
(000)	(100)	9 -5	10 3	4451.27	1202.07	.103209E-02	.311208E-02	
(000)	(020)	9 1	9 7	4453.53	1481.97	.143427E-02	.165422E-01	
(000)	(110)	10 3	9 -5	4453.77	2066.48	.101171E-06	.192375E-04	
(000)	(110)	9 8	9 -2	4455.00	2238.53	.733010E-09	.956434E-06	
(000)	(020)	9 0	9 6	4455.75	1479.75	.489603E-03	.167556E-01	
(000)	(110)	7 5	6 -5	4455.81	1221.06	.136120E-06	.449114E-06	
(000)	(001)	8 -6	8 5	4455.98	882.98	.283700E-03	.555141E-03	
(010)	(110)	8 -8	7 6	4456.53	2337.73	.611326E-10	.860926E-07	
(000)	(100)	9 3	10 7	4459.42	1638.83	.172437E-05	.421363E-04	
(000)	(100)	9 2	10 8	4459.56	1638.69	.582857E-06	.426976E-04	
(000)	(001)	5 -5	6 6	4462.20	325.33	.588383E+02	.264394E+01	
(010)	(110)	8 -7	8 3	4462.54	2337.94	.454054E-09	.316689E-06	
(000)	(110)	10 1	9 -7	4463.04	1833.60	.418969E-06	.330641E-04	
(000)	(020)	10 -7	10 3	4463.20	1293.92	.266427E-03	.124400E-02	
(000)	(001)	8 -7	9 0	4469.05	744.13	.338081E+01	.112988E+01	
(000)	(110)	9 4	8 -4	4472.66	1820.70	.145379E-07	.254143E-05	
(000)	(020)	8 2	8 8	4474.15	1260.01	.390350E-03	.464041E-02	
(000)	(020)	8 1	8 7	4474.86	1259.29	.118105E-02	.466077E-02	
(010)	(110)	7 -4	7 6	4475.23	2319.03	.117391E-09	.223696E-06	
(000)	(100)	7 -6	8 4	4475.38	586.46	.188910E-03	.888075E-04	
(000)	(001)	9 -6	8 7	4477.06	1080.65	.186407E-05	.936633E-05	
(000)	(001)	9 -7	9 4	4477.60	1079.23	.170168E+00	.283045E+00	
(000)	(100)	10 -2	10 8	4480.12	1618.13	.907075E-06	.599341E-04	
(000)	(001)	10 -7	9 6	4480.80	1293.92	.131821E-04	.613353E-04	
(010)	(110)	5 -4	6 6	4481.40	1922.94	.343601E-10	.978773E-08	
(000)	(100)	7 -4	8 6	4483.09	709.84	.133207E-03	.112952E-03	
(000)	(100)	9 -1	9 9	4483.60	1362.21	.153310E-05	.100198E-04	
(000)	(001)	6 0	7 7	4483.77	662.20	.864846E-03	.583497E-03	
(000)	(001)	8 -5	9 2	4483.77	885.85	.809005E-02	.531674E-02	
(000)	(110)	9 0	8 -8	4484.25	1479.75	.197237E-06	.670600E-05	
(000)	(001)	10 -4	9 9	4484.36	1538.38	.717725E-06	.323230E-04	

(000)	(110)	8 5	7 -3	4484.37	1598.74	.131720E-09	.264104E-08
(000)	(100)	9 -8	8 8	4485.06	920.16	.129365E-07	.300574E-07
(000)	(020)	10 -5	9 7	4488.25	1447.25	.211778E-04	.205197E-03
(010)	(110)	7 -5	8 3	4490.59	2309.89	.553925E-08	.335608E-05
(000)	(110)	7 6	6 -2	4491.23	1400.82	.351781E-08	.817924E-07
(000)	(110)	9 9	9 -1	4493.16	2238.53	.155689E-08	.669567E-06
(000)	(110)	9 2	9 -8	4495.43	1638.69	.250998E-06	.182403E-04
(000)	(001)	7 -1	8 6	4495.99	842.97	.421772E-02	.225060E-02
(000)	(001)	6 -1	7 6	4496.24	649.73	.558544E+01	.117994E+01
(000)	(110)	10 3	10 -7	4496.91	2066.48	.274269E-06	.516514E-04
(000)	(110)	10 3	10 -5	4499.09	2269.59	.751276E-07	.374424E-04
(000)	(001)	10-10	10 1	4499.91	1114.46	.178047E+00	.104673E+01
(000)	(110)	9 4	10-10	4501.13	1820.70	.273264E-08	.474681E-06
(000)	(100)	9 -2	9 8	4502.41	1343.40	.606239E-06	.106770E-04
(000)	(001)	8 -2	9 5	4506.20	1050.64	.130525E-02	.564276E-02
(000)	(001)	10 -8	10 3	4506.64	1293.23	.243149E-03	.336345E-02
(000)	(100)	9 5	10 9	4507.25	1820.70	.252159E-04	.145609E-02
(000)	(100)	9 4	10 10	4507.25	1820.70	.840704E-05	.145839E-02
(000)	(001)	6 -6	7 5	4509.84	446.67	.341205E+01	.614306E+00
(000)	(110)	9 6	9 -4	4509.97	2022.04	.182187E-07	.829367E-05
(000)	(110)	6 6	5 -4	4511.11	1048.63	.932273E-08	.398734E-07
(000)	(110)	9 2	8 -6	4513.02	1638.69	.459132E-06	.332356E-04
(000)	(100)	10 -3	10 7	4514.21	1584.04	.345896E-05	.642060E-04
(000)	(100)	10 -9	9 7	4515.05	1114.48	.114278E-06	.228215E-06
(000)	(110)	8 7	8 -3	4515.58	1798.24	.174173E-07	.902646E-06
(000)	(110)	10 -2	9 -8	4515.99	1616.13	.195757E-05	.128317E-03
(000)	(001)	9 -3	10 4	4516.67	1283.24	.271769E-02	.119186E-01
(000)	(020)	9 -4	8 8	4516.89	1217.27	.328309E-05	.314799E-04
(000)	(001)	9 7	10 10	4519.04	2022.04	.188992E-01	.286205E+01
(000)	(001)	9 6	10 9	4519.04	2022.04	.131740E-02	.825669E+00
(010)	(110)	8 -3	9 0	4519.16	2337.73	.141349E-07	.291751E-04
(000)	(001)	7 -2	8 5	4521.40	617.56	.290876E+00	.409911E+00
(000)	(100)	8 -6	8 8	4522.24	892.98	.672974E-06	.129756E-05
(000)	(110)	9 8	10 -6	4524.51	2238.53	.143370E-09	.183694E-06
(000)	(020)	6 -2	7 6	4528.15	602.86	.240820E-03	.121045E-03
(000)	(110)	9 4	9 -6	4528.93	1820.70	.936539E-07	.161689E-04
(000)	(020)	7 -3	8 5	4533.05	782.45	.227180E-02	.899502E-03
(000)	(001)	9 -6	10 1	4533.72	1080.65	.815596E-03	.404688E-02
(000)	(001)	10 0	10 7	4534.07	1729.71	.893531E-04	.996071E-02
(000)	(110)	8 5	9 -9	4535.34	1598.74	.127625E-08	.253016E-07
(000)	(100)	8 -7	9 3	4537.55	744.13	.459245E-03	.151165E-03
(000)	(001)	9 -8	10 -1	4538.90	920.16	.355719E+00	.816697E+00
(000)	(100)	10-10	10 4	4538.91	1114.46	.165881E-04	.966827E-04
(000)	(001)	10 -1	10 8	4539.76	1724.02	.278263E-03	.100491E-01
(000)	(001)	9 1	9 8	4540.77	1481.97	.106033E+00	.119944E+01
(000)	(110)	9 6	10 -8	4540.88	2022.04	.142343E-07	.643574E-05
(000)	(001)	9 0	9 9	4542.99	1479.75	.859758E-01	.288536E+01
(000)	(020)	7 -7	7 7	4544.89	586.22	.267037E-04	.411585E-05
(010)	(110)	6 -5	7 5	4545.83	2042.91	.322295E-08	.536264E-06
(000)	(110)	8 3	8 -7	4546.28	1417.79	.671732E-06	.557948E-05
(000)	(001)	8 -3	9 4	4549.75	1007.08	.549463E+00	.636402E+00
(000)	(100)	9 -7	9 7	4550.30	1079.23	.588740E-05	.963619E-05
(000)	(110)	8 7	9 -7	4550.40	1798.24	.176672E-07	.908595E-06
(000)	(100)	6 -6	7 6	4551.52	446.67	.731691E-05	.172952E-05
(000)	(100)	10 -7	9 9	4551.89	1293.92	.177181E-07	.811534E-07
(000)	(110)	8 1	7 -7	4552.19	1259.29	.447791E-05	.178710E-04
(000)	(110)	8 3	7 -5	4553.94	1417.79	.231801E-05	.191783E-04
(000)	(110)	8 5	8 -5	4555.07	1598.74	.193735E-06	.382514E-05
(000)	(020)	10 2	9 8	4556.28	1884.06	.783460E-05	.182174E-02
(000)	(020)	10 1	9 9	4556.74	1883.60	.236402E-04	.182309E-02
(000)	(020)	9 -5	10 3	4557.05	1202.07	.353813E-02	.104209E-01
(000)	(001)	7 -6	7 7	4559.51	586.46	.137607E+02	.634960E+01
(000)	(110)	9 9	8 3	4561.95	2238.53	.217861E-06	.922821E-04
(000)	(110)	9 8	8 4	4562.06	2238.53	.727076E-07	.923907E-04
(000)	(100)	7 -1	8 7	4562.25	842.97	.150557E-04	.791713E-05
(000)	(110)	7 6	3 -8	4563.18	1400.82	.927717E-13	.212302E-11

(000)	(001)	7	-7	8	4	4564.25	586.22	.947736E+01	.145453E+01
(000)	(020)	8	-8	8	6	4571.47	744.03	.211888E-04	.207582E-04
(000)	(001)	9	-5	9	6	4572.65	1202.07	.199074E-03	.584337E-03
(000)	(100)	9	-6	10	4	4572.72	1080.65	.245213E-03	.120634E-02
(000)	(001)	8	-4	8	7	4574.76	982.95	.668622E+00	.205810E+01
(000)	(110)	7	6	7	-4	4575.31	1400.82	.231389E-07	.528115E-06
(000)	(001)	10	-5	9	8	4575.49	1447.25	.145708E+00	.138488E+01
(000)	(020)	6	-3	7	7	4577.89	553.13	.567020E-03	.740341E-04
(000)	(001)	10	-6	10	5	4578.21	1438.35	.301591E-01	.823528E+00
(000)	(100)	8	-2	9	6	4578.89	1050.64	.108697E-04	.462451E-04
(000)	(001)	9	-4	10	3	4582.60	1217.27	.446235E-01	.421738E+00
(010)	(110)	6	-2	7	6	4582.77	2211.51	.779996E-12	.866779E-09
(000)	(100)	10	-8	10	6	4584.91	1293.23	.274784E-05	.373616E-04
(000)	(110)	7	4	6	-4	4587.14	1221.05	.606100E-06	.582726E-05
(000)	(110)	10	6	9	0	4587.30	2269.59	.970221E-06	.142299E-02
(000)	(100)	7	-2	8	8	4587.66	817.56	.623998E-05	.866657E-05
(000)	(110)	8	8	8	-2	4588.09	1798.24	.323077E-08	.494363E-06
(000)	(110)	7	4	7	-6	4590.61	1221.05	.126251E-06	.121290E-05
(000)	(110)	10	0	10	-10	4592.12	1729.71	.513812E-06	.565536E-04
(000)	(110)	10	3	9	1	4593.49	2269.59	.304614E-05	.148721E-02
(000)	(001)	8	-7	8	6	4594.83	744.13	.106513E-03	.346226E-04
(000)	(100)	9	-3	10	5	4594.90	1283.24	.369803E-04	.159418E-03
(000)	(110)	9	7	8	1	4597.08	2022.04	.300850E-05	.447866E-03
(000)	(100)	10	0	10	10	4598.24	1729.71	.293041E-06	.322111E-04
(000)	(110)	9	6	8	2	4599.19	2022.04	.102308E-05	.456697E-03
(000)	(110)	9	-1	8	-7	4601.86	1362.21	.565845E-04	.355672E-03
(000)	(001)	6	-4	7	7	4603.03	542.89	.568776E-04	.210955E-04
(000)	(100)	10	-1	10	9	4603.93	1724.02	.927312E-06	.330215E-04
(000)	(020)	9	-9	9	5	4604.53	920.12	.497001E-04	.374862E-04
(000)	(100)	9	-9	9	5	4604.53	920.12	.725098E-04	.547508E-04
(000)	(020)	7	-4	8	6	4605.66	709.84	.481132E-03	.397116E-03
(000)	(100)	9	-8	10	2	4606.47	920.16	.883878E-04	.199953E-03
(000)	(100)	7	-7	8	5	4606.71	586.22	.797923E-04	.121332E-04
(000)	(110)	8	8	7	2	4609.64	1798.24	.580265E-06	.883754E-04
(000)	(110)	8	7	7	3	4610.20	1798.24	.175323E-05	.889983E-04
(000)	(110)	6	5	5	-3	4612.38	1048.63	.476353E-06	.664211E-06
(010)	(110)	7	-3	3	5	4613.11	2393.01	.956373E-09	.840415E-06
(000)	(110)	7	2	6	-6	4613.39	1063.04	.440535E-05	.197420E-04
(010)	(110)	7	-7	7	7	4613.44	2180.84	.291941E-09	.927315E-07
(000)	(110)	9	7	9	-3	4615.12	2022.04	.199348E-07	.295603E-05
(010)	(110)	7	-6	8	4	4619.23	2181.31	.436856E-08	.416698E-05
(000)	(110)	10	0	9	-6	4619.92	1729.71	.233096E-04	.255017E-02
(000)	(020)	10	-4	10	6	4621.84	1538.38	.628025E-04	.274813E-02
(000)	(100)	8	-3	9	7	4622.45	1007.08	.449422E-04	.512345E-04
(000)	(001)	7	1	8	8	4624.56	983.15	.121481E+01	.971193E+00
(000)	(001)	8	-8	9	3	4625.80	744.03	.656597E+00	.829335E+00
(000)	(110)	10	4	9	-2	4627.02	2066.51	.554048E-05	.304263E-02
(000)	(001)	7	0	8	7	4627.99	929.72	.218084E-03	.504194E-03
(000)	(110)	6	5	6	-5	4628.24	1048.63	.100109E-06	.139110E-06
(010)	(110)	6	-3	7	7	4632.61	2161.67	.643535E-10	.185703E-07
(000)	(001)	7	-5	8	6	4634.73	704.23	.356535E-03	.948951E-04
(000)	(001)	9	-8	9	5	4636.68	920.16	.967521E+00	.217449E+01
(000)	(001)	9	-9	8	8	4637.59	920.12	.502780E+01	.376518E+01
(000)	(020)	9	7	10	7	4638.33	2022.04	.451913E-01	.666766E+01
(000)	(020)	9	6	10	8	4638.33	2022.04	.150639E-01	.666771E+01
(000)	(100)	8	-5	9	5	4638.80	885.85	.181762E-02	.115461E-02
(000)	(020)	8	-5	9	5	4638.80	885.85	.678889E-03	.431252E-03
(000)	(110)	10	6	10	-4	4639.35	2269.59	.635412E-08	.921479E-05
(000)	(110)	9	5	8	-1	4640.40	1820.70	.238590E-04	.134004E-02
(000)	(001)	8	0	9	7	4640.88	1133.84	.470816E-01	.294518E+00
(000)	(020)	8	8	9	8	4642.10	1798.24	.445774E-01	.674175E+01
(000)	(020)	8	7	9	9	4642.10	1798.24	.133783E+00	.674177E+01
(000)	(020)	10	-8	9	6	4642.27	1293.23	.227456E-05	.305437E-04
(000)	(100)	9	-5	9	9	4643.74	1202.07	.451681E-06	.130551E-05
(000)	(020)	10	-10	10	4	4644.67	1114.46	.173287E-04	.986996E-04
(000)	(110)	10	2	9	-4	4647.95	1684.06	.291423E-04	.459126E-02

(000)	(001)	8 -1	9 6	4649.74	1124.98	.730811E-03	.145769E-02
(000)	(110)	9 1	9 -9	4652.11	1481.97	.132820E-05	.146649E-04
(000)	(020)	9 -3	9 7	4652.26	1283.24	.165131E-03	.703085E-03
(000)	(110)	8 6	7 0	4653.92	1598.74	.798431E-05	.462767E-03
(000)	(001)	9 -1	10 6	4654.35	1362.21	.645670E-01	.401270E+00
(000)	(020)	9 -7	8 7	4654.92	1079.23	.279862E-05	.447769E-05
(000)	(001)	10 2	10 9	4657.02	1884.06	.126586E-01	.287976E+01
(000)	(001)	10 1	10 10	4657.48	1883.60	.181847E-01	.137580E+01
(000)	(110)	9 4	8 0	4659.69	1820.70	.936327E-05	.157113E-02
(000)	(100)	10 -6	10 8	4659.90	1438.35	.414877E-06	.111301E-04
(000)	(001)	10-10	9 7	4660.26	1114.46	.915955E-01	.519958E+00
(000)	(100)	9 -4	10 6	4660.87	1217.27	.189427E-04	.176022E-03
(000)	(100)	8 -7	8 7	4661.09	744.13	.375437E-06	.120303E-06
(000)	(110)	8 5	7 1	4661.83	1598.74	.257803E-04	.497227E-03
(000)	(110)	10 3	9 -1	4665.21	2066.48	.227507E-04	.412994E-02
(000)	(020)	8 -8	9 4	4667.31	744.03	.882068E-04	.846400E-04
(000)	(100)	8 -8	9 4	4667.31	744.03	.479723E-04	.460324E-04
(000)	(110)	6 3	5 -5	4667.44	891.23	.194337E-04	.125898E-04
(010)	(110)	8 -8	8 6	4668.39	2337.73	.370762E-09	.740809E-06
(000)	(110)	7 7	6 1	4668.74	1400.82	.136221E-04	.101561E-03
(000)	(020)	7 3	8 7	4670.92	1063.23	.886765E-02	.130951E-01
(000)	(020)	7 2	8 8	4671.12	1063.04	.296183E-02	.131090E-01
(000)	(110)	7 6	6 2	4671.23	1400.82	.466411E-05	.104266E-03
(000)	(110)	9 1	8 -5	4671.84	1481.97	.244638E-03	.268969E-02
(000)	(001)	8 -5	8 8	4671.86	885.85	.117821E+01	.743140E+00
(000)	(001)	9 -2	10 5	4673.16	1343.40	.132410E-03	.224672E-02
(000)	(001)	8 -6	9 5	4673.86	832.98	.988370E-04	.175151E-03
(000)	(110)	9 3	8 -3	4674.99	1638.83	.122672E-03	.285936E-02
(000)	(020)	8 2	9 6	4675.49	1260.01	.366622E-02	.416852E-01
(000)	(020)	8 1	9 7	4676.21	1259.29	.110833E-01	.418547E-01
(000)	(110)	8 0	7 -6	4677.82	1130.84	.105435E-03	.654335E-03
(000)	(020)	9 1	10 5	4678.25	1481.97	.793419E-02	.871137E-01
(000)	(020)	9 -6	10 4	4678.48	1080.65	.489780E-03	.235503E-02
(000)	(110)	10 2	10 -8	4678.86	1884.06	.133379E-06	.302013E-04
(000)	(020)	9 0	10 6	4680.47	1479.75	.270551E-02	.881301E-01
(000)	(110)	7 7	7 -3	4682.29	1400.82	.172547E-07	.128272E-06
(000)	(110)	9 3	10 -9	4683.01	1638.83	.889941E-08	.204987E-06
(000)	(020)	8 -2	8 8	4683.52	1030.64	.248066E-04	.103182E-03
(000)	(020)	6 -6	7 6	4684.34	446.67	.244224E-04	.561142E-05
(000)	(001)	10 -9	10 4	4685.43	1114.48	.972109E-04	.182980E-03
(000)	(110)	10 -5	9 -9	4686.83	1447.25	.126812E-02	.117666E-01
(010)	(110)	7 -4	8 6	4687.09	2319.03	.164119E-10	.298602E-07
(000)	(001)	9 -6	9 7	4694.07	1080.65	.221330E-04	.106070E-03
(000)	(110)	8 6	8 -4	4694.62	1598.74	.886652E-08	.509444E-06
(000)	(001)	9 -9	10 2	4695.03	920.12	.144514E+01	.106899E+01
(000)	(110)	10 -6	9 -8	4695.77	1438.35	.457966E-03	.121922E-01
(000)	(110)	10 4	10 -6	4696.53	2066.51	.172923E-07	.935578E-05
(000)	(110)	8 4	7 -2	4698.14	1417.81	.602795E-04	.145354E-02
(000)	(001)	6 -5	7 6	4698.72	447.25	.370526E+02	.283700E+01
(000)	(110)	9 5	9 -5	4699.35	1820.70	.344327E-07	.190957E-05
(000)	(100)	7 -5	8 7	4700.99	704.23	.469651E-05	.128481E-05
(010)	(110)	8 -7	9 5	4702.12	2337.94	.222679E-07	.147394E-04
(000)	(110)	8 2	8 -8	4703.99	1260.01	.824597E-07	.931892E-06
(000)	(100)	9 -8	9 6	4709.37	920.16	.373663E-06	.826841E-06
(000)	(110)	9 3	9 -7	4709.81	1638.83	.140203E-06	.324384E-05
(000)	(110)	9 9	10 -3	4709.90	2293.53	.301142E-08	.123552E-05
(000)	(100)	8 0	9 8	4711.97	1133.34	.236241E-05	.145550E-04
(000)	(020)	10 -5	10 5	4712.97	1447.25	.160732E-03	.166766E-02
(000)	(110)	5 4	4 -4	4713.99	743.95	.381631E-05	.362434E-05
(000)	(110)	8 2	7 -4	4716.12	1260.01	.199342E-03	.224701E-02
(000)	(110)	8 4	9 -8	4716.31	1417.81	.709636E-08	.170458E-06
(000)	(020)	9 -4	9 6	4718.23	1217.27	.573783E-04	.52(695E-03
(000)	(110)	7 3	6 -1	4718.63	1221.06	.181660E-03	.565984E-03
(000)	(001)	9 -7	10 4	4720.68	1079.23	.992083E-04	.156519E-03
(000)	(100)	8 -1	9 9	4720.83	1124.98	.778910E-05	.153024E-04
(000)	(001)	10 -7	10 6	4722.64	1293.92	.662410E-01	.292431E+00

(000)	(001)	10 -4	10 7	4725.40	1538.38	.919236E-05	.392864E-03
(000)	(020)	8 -3	8 7	4727.07	1007.08	.817308E-04	.911117E-04
(000)	(020)	7 -7	8 5	4729.28	586.22	.204132E-03	.302356E-04
(000)	(001)	10 -6	9 9	4729.51	1293.23	.104497E-06	.137738E-05
(000)	(100)	10-10	9 8	4731.35	1114.46	.619701E-09	.346499E-08
(000)	(100)	9 -9	10 3	4733.22	920.12	.170389E-03	.125021E-03
(000)	(110)	8 8	9 -4	4733.77	1798.24	.186825E-07	.277077E-05
(000)	(110)	8 4	8 -6	4733.90	1417.81	.713260E-09	.170692E-07
(000)	(100)	9 -1	10 7	4736.04	1362.21	.120379E-04	.736449E-04
(000)	(110)	10 -3	10 -9	4737.60	1584.04	.451645E-07	.798790E-06
(000)	(110)	6 6	5 0	4737.97	1048.63	.337651E-04	.137499E-03
(000)	(001)	9 -3	9 8	4739.50	1283.24	.113171E+00	.472981E+00
(000)	(110)	7 4	6 0	4741.52	1221.05	.771116E-04	.717239E-03
(000)	(110)	8 3	7 -1	4742.47	1417.79	.297329E-03	.236731E-02
(000)	(110)	9 5	10 -7	4742.69	1820.70	.104422E-07	.573835E-06
(000)	(110)	7 5	8 -7	4743.01	1221.06	.222294E-07	.689026E-07
(000)	(110)	7 1	6 -5	4743.72	933.15	.111808E-02	.871338E-03
(000)	(100)	8 -6	9 6	4746.55	882.98	.546455E-05	.100383E-04
(000)	(110)	9 -4	8 -8	4746.73	1217.27	.143962E-02	.131354E-01
(000)	(110)	6 5	5 1	4747.20	1048.63	.111428E-03	.150959E-03
(000)	(110)	9 7	10 -5	4747.44	2022.04	.125179E-06	.180448E-04
(000)	(110)	9 2	8 -2	4747.64	1638.69	.967273E-04	.665588E-02
(000)	(110)	7 3	7 -7	4748.25	1063.23	.459452E-06	.667439E-06
(000)	(110)	7 5	7 -5	4750.67	1221.06	.134648E-06	.416684E-06
(000)	(110)	8 6	9 -6	4750.89	1598.74	.677083E-09	.384424E-07
(010)	(110)	6 -6	7 6	4752.37	2041.91	.113959E-09	.541522E-07
(000)	(001)	7 -6	8 5	4752.50	586.46	.162805E+01	.720728E+00
(000)	(110)	7 7	8 -5	4752.99	1409.82	.968921E-11	.709588E-10
(000)	(110)	10 1	9 -3	4753.56	1883.60	.222081E-03	.164624E-01
(000)	(110)	7 3	6 -3	4753.77	1063.23	.109499E-02	.145824E-02
(000)	(100)	9 -2	10 8	4754.85	1343.40	.486036E-05	.810563E-04
(010)	(120)	5 3	4 -3	4755.70	2252.71	.551516E-07	.239861E-04
(000)	(110)	6 6	6 -4	4759.56	1048.63	.369362E-07	.149730E-06
(000)	(110)	9 -5	8 -7	4762.00	1202.07	.498749E-02	.140576E-01
(000)	(001)	8 2	9 9	4762.73	1260.01	.508672E-04	.567769E-03
(000)	(110)	6 6	7 -6	4763.03	1048.63	.320610E-08	.129672E-07
(000)	(001)	8 1	9 8	4763.45	1259.29	.263486E+00	.976801E+00
(000)	(100)	10 -9	10 5	4763.66	1114.48	.166989E-05	.309153E-05
(000)	(110)	10 -3	9 -7	4764.60	1584.04	.223218E-02	.392569E-01
(000)	(100)	9 -6	9 8	4765.16	1080.65	.666082E-07	.814449E-06
(000)	(110)	9 3	10 -2	4774.04	2238.53	.141442E-08	.171752E-05
(000)	(001)	7 -3	8 8	4775.26	732.45	.183781E+01	.698275E+00
(000)	(020)	10 2	10 8	4776.31	1284.06	.108625E-03	.240945E-01
(000)	(020)	10 1	10 7	4776.77	1883.60	.327583E-03	.241650E-01
(000)	(001)	9 1	10 8	4781.81	1481.97	.135956E-03	.146041E-02
(000)	(110)	10 -4	10-10	4783.45	1538.38	.128210E-05	.541327E-04
(000)	(001)	9 0	10 7	4784.03	1479.73	.977764E-02	.311606E+00
(000)	(110)	6 4	6 -6	4785.17	891.26	.108388E-05	.205489E-05
(000)	(110)	6 4	5 -2	4785.95	891.26	.363406E-03	.688887E-03
(010)	(120)	6 1	5 -3	4786.07	2399.96	.121018E-05	.105953E-02
(000)	(100)	10 -4	10 10	4789.57	1538.38	.508773E-07	.214527E-05
(000)	(110)	9 -2	9 -8	4790.72	1343.40	.383329E-05	.637777E-04
(000)	(001)	8 -4	9 7	4791.77	982.95	.727342E-01	.213746E+00
(010)	(120)	4 4	3 -2	4796.13	2129.84	.430919E-08	.309302E-05
(000)	(110)	10 -1	9 -5	4796.23	1724.02	.140225E-02	.479318E-01
(000)	(100)	9 -7	10 5	4798.91	1079.23	.261773E-04	.406260E-04